



WEBER STATE
UNIVERSITY

CRSA

WSU Community Outreach Center

March 15, 2016



Weber State University






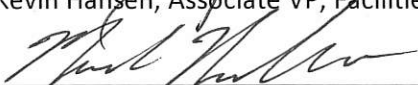

Community Outreach Center Program

APPROVALS

March 2016

Review Signatures

We have reviewed the WSU Community Outreach Center Program and warrant that it adequately represents our request for a facility to fulfill our mission and programmatic needs. All appropriate parties representing the University have reviewed it for approval.

	3/2/16
Norm Tarbox – Vice President, Administrative Services	Date
	3-01-2016
Bruce Davis, Vice Provost, Dean - Continuing Education	Date
	3-1-2016
Brian Stecklein, Associate Dean, Continuing Education	Date
	3-1-2016
Luis Lopez, Director, Community Outreach Center	Date
	3-1-2016
Kevin Hansen, Associate VP, Facilities & Campus Planning	Date
	3/1/16
Mark Halverson, Director, Campus Planning & Construction	Date
	3/1/16
Chad Downs, Project Manager	Date

ACKNOWLEDGEMENTS**CORE TEAM**

The programming team would like to thank the Community Outreach Center Program Executive Committee for their valuable input and direction, without which it would not have been possible to prepare this facilities program. The members of these groups made themselves available throughout the process as often as needed to provide answers and feedback. They were essential to making the difficult decisions necessary to prepare a realistic and relevant planning document which will be the basis for the Community Outreach Center design.

These groups included the following members:

Executive Committee

Norm Tarbox	Vice President, Administrative Services
Bruce Davis	Vice Provost, Dean - Continuing Education
Brian Stecklein	Associate Dean, Continuing Education
Luis Lopez	Director, Community Education Center
Kevin Hansen	Associate VP, Facilities & Campus Planning
Mark Halverson	Director, Campus Planning & Construction
Chad Downs	Project Manager, Campus Planning & Construction

Additional Participants: Programming this facility benefitted from the input from others. Such involvement ranged from workshops to one-on-one consultations with the programming team. The following list includes those who made critical contributions to the programming and conceptual design process who have not been previously mentioned.

Brenda Kowalewski	Director, Center for Community Engaged Learning
Azenett Garza	CCEL Coordinator, Community Research Extension
Paul Schvaneveldt	Chair, Child and Family Studies
Camie Bearden	Director, Children's School - Child and Family Studies

Programming and Conceptual Design Team

Kathy Wheadon	Principal in Charge, CRSA
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Ken Wheadon	Project Architect, CRSA
Megan Brown	Project Intern, CRSA
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	Audio Visual / Information Technology Designer
Jeremy L. Archer	Structural Engineer, ARW Engineers
J.R. Anzer	Cost Estimator, Parametrix

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SECTION 1

INTRODUCTION

1.1 Project Scope and Background

In the Fall of 2015, Weber State University (WSU) solicited for services to program a Community Outreach Center for the Division of Continuing Education. The program's vision is to break down social and historic barriers to higher education. In order to create an environment of trust, collaboration and inclusivity between Weber State University and under-represented populations in the community a new Community Outreach Center will be developed. The university contracted CRSA to provide these services.

As part of the initial scope of work, CRSA documented the existing community outreach centers and peer institution spaces in order to understand the needs of the university and the end-users of the building. A one-story building is planned for an intercity site at the corner of Monroe Boulevard and 26th Street in Ogden, Utah. Buildings and site development were demolished to remediate the brownfield site and make way for the construction of the new facility.

The CRSA programming team began their work in late 2015. In a series of six client-centered work sessions and on-site meetings, the team examined and questioned building uses, users and internal working relationships, explored multiple organization models, defined academic and operational priorities, and finally developed a set of conceptual design options to serve the long term needs of the University, the Division of Continuing Education and a diverse set of future building occupants.

1.2 Program Objectives and Guidelines

This program's main challenge was to provide for the complete array of essential academic and resource services within a refined footprint on the existing site. Other challenges included enhancing affinities between program areas, understanding student and staff space use, and balancing the needs of the diverse groups which share the Community Outreach Center.

CRSA approached these challenges by first touring other WSU Continuing Education facilities and peer institutions, staging ongoing meetings with all the Community Outreach Center user groups, and vetting a wide variety of program concepts. This collaborative planning approach generated critical synergies to help assure the project's success. In consultation with WSU leadership, faculty, and administration, the programming team identified student-centered service as the touchstone of the project. This standard reflected the existing values and needs of the institution, trends of WSU's recent renovation and new construction projects, and the user groups' long-term vision for the space, and guided the development of the program's objectives.

Goal Development

One of the first steps in establishing goals for the Community Outreach Center project was to compare the space needs of this center against those at existing WSU facilities, peer institutions and academic community center trends as a whole.

While much of the focus of the project was to provide for a center for community engagement, equally important was the desire to simultaneously provide quality academic instruction space, campus-standard technology, vibrant working space for staff, and appropriate environments for the Children's School. WSU is not unique in its approach to community outreach, but its innovative staff and facilities merit comparison to its peer institutions to understand academic trends. In order to gauge the direction of other community outreach facilities, a series of peer institutions were selected for purposes of research and comparison—to establish “benchmarks” for the project.

Within each of the eight facilities visited and documented, there are a number of consistencies and a set of variables mostly dependent on the communities served. The Continuing Education team was able to assist the programming team in finding facilities that were exemplary in their area – whether it was community-centric kitchen areas, engaging learning environments, or quality staff work suites. Findings showed that WSU provides resources similar to many of its peer institutions. But in several areas of community service, the university is adept at weaving together diverse programs into buildings that are subsequently greater than the sum of their parts.

The Community Outreach Center is comprised of four mission sensitive areas: community engagement, academic instruction, staff support and children’s education. While these four areas have overlapping goals, space requirements, acoustical isolation, technology needs and aesthetic requirements are unique to each. The program works to define both individual and collective requirements within this document.

An overall understanding of the fit and finish has been represented by the Associate Dean for Continuing Education. As this facility may be a patrons first experience with a higher education institution in general and WSU specifically, engaging environments that are both cost effective and inviting to building users are important project drivers. A successful facility will be busy, and thus heavily used and finishes, while warm and pleasant, also must meet university standards for wear and durability.

The ultimate aim of these recommendations is to craft a highly collaborative and multidisciplinary facility where users can freely and serendipitously interact. Such interaction will promote unforeseen synergies between the staff, students and faculty, thus enhancing the quality of the learning experience at large. The program calls for a design which is transparent and collaborative, which provides for shared amenities and preserves necessary boundaries and separations, and which establishes a coherent and appropriate image of academic identity.

If these recommendations are successfully implemented in the design, the new Community Outreach Center will become a hub of student-centered learning and interaction. State-of-the-art digital services will be made available to students in close alignment with ever-evolving academic delivery methods. Traditional quiet meeting and more interactive community building spaces will be provided, and programs for every level of academic need will be accommodated. This will make the Community Outreach Center not only a beacon of community engagement, but the embodiment of the WSU ethic as well.

1.3 Client Team

WSU senior administration and staff served as the program directors for the project. As previously stated in the Acknowledgements, the Community Outreach Center programming team assembled an Executive Committee of university representatives to establish the overall project budget (both hard and soft costs), which was then validated by the team's cost estimators. The Executive Committee also served as a sounding board and a voice of reason to ensure that the final program was just, accurate, and defensible. The Facilities Department provided its planning, design and construction resources for consultation and review, sustainability planning, and members of the operations and maintenance staff provided input to the process as well. The University was represented on a day-to-day basis by a Project Manager, and at an administrative level by the University Vice President of Administrative Services, the Provost and Dean of Continuing Education, the Associate Vice President for Facilities and Campus Planning, and the Director of Campus Planning and Construction.

The Community Outreach Center was represented during the programming process by the Director of the Community Education Center, the Director and staff of the Center for Community Engaged Learning, and the Chair of Child and Family Studies and the Director of the Children's School, and their respective staff. Each group gave the programming team access to its members and resources. The programming team convened smaller groups as needed to work on elements of the program which required more specific input and expertise. The success of this program should be attributed to these teams' willingness to question their own needs, to balance their future needs against the resources available, and to hold the interests of the Community Outreach Center paramount. As this project proceeds, their cooperation will continue to be invaluable.

SECTION 2

EXECUTIVE SUMMARY

2.1 Introduction

In late-2015, the CRSA programming team began a study of Weber State University Community Outreach Center Project. This study included an existing conditions assessment, site analysis, analysis of spatial needs of the Center prime programs, and recommended concepts for design. The team spent significant time planning facilities that would fit the Centers place in the community, respond to its prominent site, resolve building circulation and work flow goals, increase its functional efficiency, and promote community-oriented service.

The programming team met regularly with members of the Executive Committee and University stakeholders. Thru spring 2016 the programming team:

- Conducted a series of meetings and workshops to address the university's vision and goals for the project;
- Analyzed existing facilities and collected quantitative data to better understand the proposed use and organization of the Community Outreach Center;
- Conducted a number of interviews to identify spatial needs and summarized the results in program diagrams;
- Explored and evaluated options for organizing Center activities from both a functional and economic standpoint;
- Reviewed the systems and infrastructure of the proposed facilities and identified design strategies to meet project goals;
- Outlined the goals of site circulation, building orientation and utility systems to meet site planning goals;
- Outlined a plan for future technology incorporation and utilization;
- Incorporated reviews and recommendations by expert engineering consultants;
- Developed cost models to determine priorities and meet the overall project budget;
- Created room data sheets to document specific space requirements;
- Developed preliminary conceptual designs and blocking/stacking models;
- Addressed issues related to future planning; and
- Reviewed and finalized recommended concept plans.

A major focus of the planning, programming and early conceptual design phase was to recommend special organization which could engage building users and plan for site prominence at the corner of Monroe Boulevard and 26th Street in Ogden, Utah. The team defined planning priorities and identified potential efficiencies in order to address issues of program growth, the adjacency requirements of program components, and future contingencies within the confines of the available site.

2.2 Project Philosophy

The vision for the Community Outreach Center project recognizes the role of the center as a hub for student engagement and community outreach. The new Center will serve as a home, a refuge, a collaborative and vibrant environment for students, faculty, staff, and as an avenue for outreach to the greater community. With this vision in mind, the following purposes and goals were established:

Planning

- Create a visually open facility through which users may easily navigate.
- Make the main entry an accessible, easy to find beacon to the community.
- Arrange departments in a way that facilitates synergy among functions.
- Maximize gathering spaces within the footprint to support collaboration.
- Locate service points and essential functions in an intuitive pattern.
- Eliminate barriers (real and perceived) to disabled persons.
- Enhance users' connection to outdoor spaces, even when weather discourages being out of doors.

Community Outreach Center Environments

- Create collaborative environments for staff, students and community users.
- Create a diverse variety of community gathering environments.
- Provide comfortable meeting, work and academic learning spaces.
- Develop spaces for inquiry, consulting and conversation.
- Provide group meeting and counseling rooms.
- Develop a consolidated service area for the Children's School
- Respond to the need for acoustic control.
- Place the reception desk at the building gateway and with visual access of halls.
- Create a space for exhibiting art work.
- Provide natural light and quality finishes as the budget allows.

Technology

- Provide technology-rich environment on par with the main WSU campus.
- Create a computer lab that is rich with resources, both physical and academic.
- Ensure that the facility is as hospitable to technology as money allows.
- Anticipate and plan accommodation for future technology.

Infrastructure

- Plan for building expansion to the west as an extension of the first phase of work.
- Provide the infrastructure necessary to service technology-rich environments.
- Address fire protection and life safety needs.

- Plan for future roof mounted photovoltaic array.
- Address accessibility (ADA) requirements.
- Take advantage of opportunities to increase comfort and conserve energy.

2.3 Program Summary

Mission

The Community Outreach Center is a one-stop center providing support for underserved populations including minority, low-income and first-generation community members to access and complete post-secondary education. This new service center for the Community Education Center, Center for Community Engaged Learning, and Children's School will strengthen the role of WSU in the community and serve as a welcoming gateway within the neighborhood. As such, it must facilitate collaboration and community building.

The Community Outreach Center will be an attractive, modern building that will develop a visually appealing and functional structure on the corner of Monroe Avenue and 26th Street, linked to community buildings by way of a developed corner plaza and building entry. Core services will include academic instruction space – including the Community Gathering Room and Computer Lab/Classroom, administrative office suites for Community Education Center and the Center for Community Engaged Learning, spaces to support community engagement – from the entry lobby, lounge space and Community Gathering Room kitchen, and the Children's Center. Building users will be supported by joint resources such as shared printing, lounge and outdoor space. The site must service indoor outdoor activities and support the building's role as a community hub and resource.

Energy, Environment and Resource Conservation

A supporting goal of the programming and concept design process has been to support WSU and DFCM sustainability goals. The intent is to incorporate high-performance design features that will boost maintenance efficiency and lower operation costs. By doing so, WSU will benefit from a high-performance building and showcase the benefits of sustainable design.

The Community Outreach Center will select specific LEED Silver standards, as well as follow DFCM High Performance Building Standards. An initial set of project goals, see Appendix, has been vetted and will serve as a component of the architectural guidelines for the new COC.

Building

The Community Outreach Center will enhance WSU's outreach mission by providing for spaces that represent:

- Rich, blending collaborative teaching, outreach, and community building within the social atmosphere of a well-respected collegiate facility;
- Diverse digital resources with integrated work and instructional areas; and

- Varied types of learning environments that support the multiple needs of children and adult students.

To facilitate the Community Outreach Center’s role as a community “hub,” the building must be well-organized. Section 4 of this document outlines the building’s functional relationship to the site and addresses provisions to create efficient, flexible, and engaging environments.

Space Summary List

Section 3 of this document outlines the various rooms and areas within the Community Outreach Center and their respective space requirements. The facilities will occupy an estimated 11,000 gross square feet on one level. The resulting net assignable area will be approximately 7,500 square feet (64% of the total). Consequently, approximately 32,500 square feet (26%) are attributed to non-assignable areas—public circulation (such as lobbies and lounges), mechanical and electrical shafts and rooms, restrooms, wall thicknesses, and other non-assignable uses.

The program contains four primary divisions as identified in Section 3 (the “Space Summary”), consisting of:

Division	Gross Area
1 Administration	3,308 GSF
2 Academic Instruction	6,346 GSF
3 Child & Family Studies	1,631 GSF
4 Building Services	1,180 GSF
ON-CAMPUS TOTAL	11,785 GSF

Section 3.1 contains a summary of the net area assigned to each of these preliminary programmatic divisions. Section 3.4 provides a verbal description of the primary spaces and outlines the proposed basic building organization. Finally, Section 3.6 contains the individual space outlines—detailed summaries of the specific requirements of each individual space or room. These individual space outlines consist of room data sheets and accompanying graphics, and they represent the heart of the program.

Additional Criteria

The remaining sections of the program document include descriptions of concepts and criteria that will be important to the continued development of the concept design. These include specific requirements and standards related to building and life-safety codes, structural, civil, mechanical, electrical, technology, and acoustical requirements.

The program also includes a detailed project schedule, and a conceptual cost estimate along with appendices containing recommended zoning and stacking diagrams, an overview of the

2.4 Project Implementation: Schedule and Costs

Design and Construction Schedule

Program Complete	March 2016
Funding Commitment in place with Ongoing O&M	April 2016
Board of Regent Approval	20 May 2016
Building Board Approval	6 July 2016
Design Start	September 2016
Construction Start	March 2017
Construction Complete	31 December 2017
Furnish and Prep Building for Occupancy	January – February 2018

Cost Summary

The program includes a programmatic estimate of construction costs and total project costs that will be reviewed and will be approved by the Weber State University and the Community Outreach Center Program Executive Committee.

SUMMARY OF SPACES				11,785 gsf	\$ 250 ave./gsf	\$ 2,946,154
1	ADMINISTRATION	2,475	3,808	32%	\$ 250	\$ 951,923
2	ACADEMIC INSTRUCTION	4,125	6,346	54%	\$ 250	\$ 1,586,538
3	CHILD & FAMILY STUDIES	1,060	1,631	14%	\$ 250	\$ 407,692
Utilities Connection				400 lf	\$ 150 /sf	\$ 60,000
Site Development				20,000 sf.	\$ 30 /sf	\$ 600,000
summary of construction costs				11,785 gsf		\$ 3,606,154
overhead / profit					4%	\$ 144,246
general conditions					5%	\$ 180,308
design contingency					15%	\$ 540,923
construction budget					\$ 379	\$ 4,471,631
furniture, fixtures & equipment (ff&e)					\$ 30.00 /sf	\$ 353,538
plan review & building permitting					1%	\$ 44,716
commissioning (estimated cost only, actual cost held by WSU)					0.5%	\$ 22,358
energy modeling (estimated cost only, actual cost held by WSU)					0.1%	\$ 4,472
administrative costs / fees (estimated cost only, actual cost held by WSU)					13%	\$ 581,312
escalation					4%	\$ 178,865
WSU Community Outreach Center building project soft costs (estimated only, actual costs held by WSU)						\$ 1,185,262
WSU Community Outreach Center total project costs						\$ 5,656,893

SECTION 3

SPACE SUMMARY

3.1 Summary

The following narrative and tables summarize the square footage allocation in the proposed Community Outreach Center. The tables provide net and gross square footage allocations for individual spaces as well as program area totals. The subsequent data sheets accurately reflect the specific furniture and equipment requirements for each room, but the accompanying graphic illustrations represent only one of many possible spatial configurations. The specific layouts will almost certainly change during design development.

In aggregate, the spaces detailed below are sized to fit within the footprint of the Community Outreach Center concept design. Some minor additions to this program may be considered to support future building expansion, such as larger restrooms or mechanical support space. Consequently, the total programmed area is approximately 11,500 gross square feet.

3.2 Programming Process

In late-2015 CRSA began the iterative, multi-phase programming process with a schedule of completion in March 2016. The team began by comprehensively reviewing existing programs and peer institutions (including measurements and photographs) to better understand the building space needs and its mission. They interviewed the future building users to determine their spatial and equipment needs, program adjacencies and affinities, and to identify possible efficiencies.

Equipped with the information gathered in these interviews, the team prepared several conceptual floor plan layouts to test what they had learned. The plans were then presented to the staff for critique and revision. This dynamic phase of the project included a number of working sessions with the Executive Committee and break-out sessions with specific user groups. Gradually, a complete scheme began to emerge.

The data, graphics, and narrative found here are the sum of these intensive discussions and planning exercises. They form the foundation upon which a visionary, community-centered facility can be designed and built.

3.3 Room and Space Listing

3.3.1 Building Efficiency

The building space utilization efficiency for the Community Outreach Center is 64%. The assignable space of approximately 7,800 net square feet (NSF) represents the essence of the programmed spatial requirements. This number represents the actual square footage used for functions directly related to running the COC. However, the gross square footage (GSF) is the most important determination of building size. GSF results when NSF is multiplied by a grossing factor to include necessary support spaces such as restrooms, circulation, structure and partitions, building support and maintenance areas, and other mechanical, electrical and communications shafts and spaces. The average net-to-gross ratio for assignable space is 1.54; which results in a GSF for the building of approximately 11,800.

AREA	DESCRIPTION	PROP QTY	NASF	NET TO GROSS	GASF	TOTAL NET SF	TOTAL GROSS SF
ENTIRE PROGRAM						7,704	11,785
1	ADMINISTRATION					2,475	3,808
1.1	Entry					440	677
1.1.1	Lobby/Reception	1	320	1.54	492	320	492
1.1.2	Lounge	1	120	1.54	185	120	185
1.2	Offices					1,635	2,515
1.2.1	CCEL Office	1	120	1.54	185	120	185
1.2.2	CCEL Office Shared	1	600	1.54	923	600	923
1.2.3	CEC Office	1	120	1.54	185	120	185
1.2.4	CEC Office Shared	1	635	1.54	977	635	977
1.2.5	CEC Counseling	2	80	1.54	123	160	246
1.3	Support					400	615
1.3.1	Conference Room	1	320	1.54	492	320	492
1.3.2	Copy / Mail / Work Area	1	80	1.54	123	80	123
2	ACADEMIC INSTRUCTION					4,125	6,346
2.1	Classrooms					3,720	5,723
2.1.1	Computer Lab	1	900	1.54	1,385	900	1,385
2.1.2	Community Gathering Room	1	2,820	1.54	4,338	2,820	4,338
2.2	Support					405	623
2.2.1	Kitchen	1	225	1.54	346	225	346
2.2.2	Chair and Table Storage	1	180	1.54	277	180	277
3	CHILD & FAMILY STUDIES					1,060	1,631
3.1	Children School					1,060	1,631
3.1.1	Office	1	120	1.54	185	120	185
3.1.2	Classroom Restrooms	1	60	1.54	92	60	92
3.1.3	Childcare Room	1	700	1.54	1,077	700	1,077
3.1.4	Storage, Prep and Observation	1	180	1.54	277	180	277
3.1.5	Childcare Support	-	135	1	135	-	-
3.1.6	Outdoor Play Yard	-	1500	1.00	1,500	-	-
4	BUILDING SERVICES					1,104	1,104
4.1	Support					1,104	1,104
4.1.1	Restrooms	2	150	1.00	150	300	300
4.1.2	Janitorial/Custodial	2	80	1.00	80	160	160
4.1.3	Mechanical/Electrical	1	324	1.00	324	324	324
4.1.4	Telecommunications	1	120	1.00	120	120	120
4.1.5	Building Storage	1	200	1.00	200	200	200
TOTAL ASSIGNABLE SPACE						7,704	11,785

3.4 Building Organization

The following is a narrative description of the context and rationale for the building organization as it is outlined in the space summary. Work will develop a contemporary facility with services commensurate with a university-level academic Community Outreach Center.

Circulation and Access

“Circulation” refers to the flow of people, information resources, and equipment into, through, and out of the building. Addressing the Community Outreach Center’s circulation issues was a key component of the planning process. In the conceptual planning stage, the team focused on crafting a main entry that would be easily discernible to a first-time visitor, would be clearly visible and logically positioned for convenient access, and would take advantage of existing corner location of the Center. Ideally, the main circulation route should take advantage of directing building users to the most public and prominent Center functions. The “front-door” should be easy to find, easy to enter for people of all abilities and should develop both indoor and outdoor features to support community gathering and collaboration. Lounge seating and information nodes should be located near the main entry and along a main public circulation route. Secondary entrances must make similar connections to main public thoroughfares, public plazas, and primary pedestrian circulation routes and link internally to a well-defined circulation system. The building’s program should be intuitive enough that a first-time user could navigate its expanse without the aid of a floor plan.

Vehicular circulation into and out of the site areas must be clear, efficient, and safe, and service areas screened from view if possible. Accessible parking must be easy to find and have easy access to a primary building entrance. Parking lot design should provide safe access of parents and children to the Children’s School immediately adjacent to internal site sidewalks and without having to cross drive aisles.

Building Entry

The Community Outreach Center has multiple entries into the building, each of which provides both a distinctive entrance into the project and supports indoor and outdoor community gathering spaces like lounge seating, access to the kitchen, and access to information. Each entry will also aid wayfinding through the building and help organize building circulation. The main public entry into the building will be at the corner of Monroe Avenue and 26th Street. Secondary entrances will be located with ease off access to the parking lot to the south of the building.

Information

A reception area at the main building entrance will be supported by information signage at secondary entrance points allowing students and visitors to browse unaided. The reception design shall be located to serve as the main point of contact, but have visual access to the center’s main circulation area as to generally monitor the entire facility.

Displays

The Community Outreach Center must be a welcoming community resource that celebrates access to educational opportunities and student success. As such there must be spaces within the Center for large graphic displays that represent Weber State University, the community engagement mission and individual students and graduates. Pin and post areas should be planned to support program goals and the distribution of information. Brochure racks should be located where they can be managed and where direction to their offerings can be highlighted by staff.

Security

Monitoring and recording cameras will provide the building with some visual surveillance of the main public areas in the Community Outreach Center. Monitoring will be managed by staff on the WSU main campus.

Level One Services

Lobby | Display Area

As the first point of information and a welcoming staff presence, the lobby area is an important hub of public activity in the Community Outreach Center. This space is oriented to the support a relationship with the community at the plaza / entry zone at the corner of Monroe Avenue and 26th Street. The lobby will host a waiting area, display illustrating WSU's community engagement mission and student success stories, and reception.

Reception Design | Information Distribution

The reception desk located in the lobby will accommodate two staff members. The reception desk must be oriented to have a line of sight to both the front doors and down the main building corridor. This visual oversight of the building circulation systems will support building wide security. The reception area and lobby zone must support information distribution. Development of the size and extent of information distribution will be developed within the architectural design development phase. The reception area must also have visual line of sight to the Community Outreach Center director's office.

Community Education Center Staff Work Area

A staff work suite for the Community Education Center will host a set of open offices, a single private office for the director, and two support spaces for counseling and meetings. This suite will need to be accessible from building circulation via an entry door that can be closed for acoustic control and after hour's security. Ease of access to the copy/mail room and conference room is desired. This space must be located in direct adjacency the building's lobby / reception area, with visual access from the director's office to the lobby area.

Building Support (Conference Room, Copy/Mail Room, etc.)

There are a few joint use spaces within the building, including a conference room and copy/mail room. Each of these spaces will need access from the staff, but also building visitors and students. Other building support spaces include restroom/janitorial core, mechanical and electrical rooms, and storage. Storage should be distributed throughout the building as closed and lockable cabinetry within the public hallway system, rather than in a separate enclosed storage room.

Community Gathering Room & Kitchen

Three general access classrooms have been aggregated into the Community Gathering Room. These three spaces can be organized as a single space or as three separate spaces via the use of operable acoustical panel partitions. Each space will have its own control system for lighting and A/V or can be used in combination. One classroom will be adjacent and able to be open to the kitchen – a community resource space for food preparation, gathering and fun. The kitchen will have range, sinks, refrigeration, ovens and preparation space. The space will primarily function as an informal gathering space, community kitchen, and building break area. The Community Gathering Room must have access to an exterior patio.

Computer Lab

This space will serve as a computer lab and classroom. Meeting WSU academic classroom standards, this space will have a lecture podium, projection screen and projector, wall mounted white boards, and semi-fixed table and chair configuration. Each powered table will seat two students with each having access to a computer workstation.

Center for Community Engaged Learning (CCEL) Work Area

A staff office suite for CCEL will consist of four large and eight small open workstations and one private office. This suite's preferred location is separate from the CEC office suite to provide another staff presence within the building, although this suite also needs access to the copy/mail/work room and conference room.

Children's School

The Children's School consists of five program areas – entry vestibule, staff office, storage and observation room, classroom and playground. The entry vestibule is an area that support child drop off and pick up with a wall mounted computer station and serves as a lunch storage and warming area. The staff office must accommodate work area for two staff members. The storage and observation is a multifunction space with room for materials and toy storage, classroom preparation, and a viewing window into the classroom for educational observation. The observation area must have a small work surface to accommodate note taking with access to power and data. The classroom is an open room providing the staff to easily rearrange classroom furniture to form small and large teaching and play spaces. A small alcove with the

classroom will be outfitted with children size toilets and sinks. The classroom has direct access into an enclosed children's playground. These five areas must meet the requirements for childcare centers established by the Utah Department of Health and Bureau of Child Development.

3.5 Block & Stack Diagrams

The following graphics illustrate groupings and adjacencies for all the spaces in the Library Program.



3.6 Individual Space Outlines

The following space outlines describe the requirements of assignable space to be contained within the Community Outreach Center program, including size, use, characteristics, technology, mechanical and electrical components, and equipment and furnishings.

Using these space outlines, the programming team was able to estimate the total cost of Furniture, Fixtures & Equipment (FF&E). All spaces are enumerated and broken down in Section 6.3: Furniture, Fixtures & Equipment Cost Summary. The space outlines do not include the non-assignable areas of the building, such as common areas including restrooms, circulation, mechanical rooms and shafts, and other supporting spaces. The individual space outlines define the requirements of spaces, not rooms *per se*.

AREA	DESCRIPTION	PROP QTY	NASF	NET TO GROSS	GASF	TOTAL NET SF	TOTAL GROSS SF
ENTIRE PROGRAM						7,704	11,785
1	ADMINISTRATION					2,475	3,808
1.1	Entry					440	677
1.1.1	Lobby/Reception	1	320	1.54	492	320	492
1.1.2	Lounge	1	120	1.54	185	120	185
1.2	Offices					1,635	2,515
1.2.1	CCEL Office	1	120	1.54	185	120	185
1.2.2	CCEL Office Shared	1	600	1.54	923	600	923
1.2.3	CEC Office	1	120	1.54	185	120	185
1.2.4	CEC Office Shared	1	635	1.54	977	635	977
1.2.5	CEC Counseling	2	80	1.54	123	160	246
1.3	Support					400	615
1.3.1	Conference Room	1	320	1.54	492	320	492
1.3.2	Copy / Mail / Work Area	1	80	1.54	123	80	123
2	ACADEMIC INSTRUCTION					4,125	6,346
2.1	Classrooms					3,720	5,723
2.1.1	Computer Lab	1	900	1.54	1,385	900	1,385
2.1.2	Community Gathering Room	1	2,820	1.54	4,338	2,820	4,338
2.2	Support					405	623
2.2.1	Kitchen	1	225	1.54	346	225	346
2.2.2	Chair and Table Storage	1	180	1.54	277	180	277
3	CHILD & FAMILY STUDIES					1,060	1,631
3.1	Children School					1,060	1,631
3.1.1	Office	1	120	1.54	185	120	185
3.1.2	Classroom Restrooms	1	60	1.54	92	60	92
3.1.3	Childcare Room	1	700	1.54	1,077	700	1,077
3.1.4	Storage, Prep and Observation	1	180	1.54	277	180	277
3.1.5	Childcare Support	-	135	1	135	-	-
3.1.6	Outdoor Play Yard	-	1500	1.00	1,500	-	-
4	BUILDING SERVICES					1,104	1,104
4.1	Support					1,104	1,104
4.1.1	Restrooms	2	150	1.00	150	300	300
4.1.2	Janitorial/Custodial	2	80	1.00	80	160	160
4.1.3	Mechanical/Electrical	1	324	1.00	324	324	324
4.1.4	Telecommunications	1	120	1.00	120	120	120
4.1.5	Building Storage	1	200	1.00	200	200	200
TOTAL ASSIGNABLE SPACE						7,704	11,785

WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration

1.1.1. Lobby / Reception

SPACE INFORMATION

Room Function: Main entry and reception area with waiting area, and floor space for display
Adjacencies: CCEL Office (1.2.1), CCEL Office Shared (1.2.2) **Special Requirements**
Public access control point to public access
Room Type: Open
Access: Public
Room Utilization M-F 8am-5pm
General Notes: Power and data to "J" box adjacent to reception desk

ROOM SIZE AND CAPACITY

Proposed Area: 320 **Room/Space Quantity:** 2 **Total Area:** 346 SF
Assigned Capacity: 2 **Unassigned Capacity:** 3 guest(s) **Total Capacity:** 5

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet
Wall Finish: Gypsum board (painted) with glazed storefront
Base Finish: Rubber
Doors:
Type: Double **Height:** 84"
Width: 36" **Door Panel:** Glazed
Ceiling Treatment: Suspended acoustical lay-in tiles
Ceiling Height: 9' minimum
Acoustic Treatment: Provide privacy from adjacent spaces
Windows:
Natural Lighting: Required
Sidelight: Vision Panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System **AV Requirements:** Wall mounted flat panel display(s)
Plumbing: None **Wire Management:** Wall outlets
Fire Protection: Sprinkler **Data Management:** Tele/data outlet(s)
Security: n/a **Artificial Lighting:** Direct/Indirect LED
Electrical: 120V wall outlet(s) **Telephone:** Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment: **Furniture:**

WSU Community Outreach Center

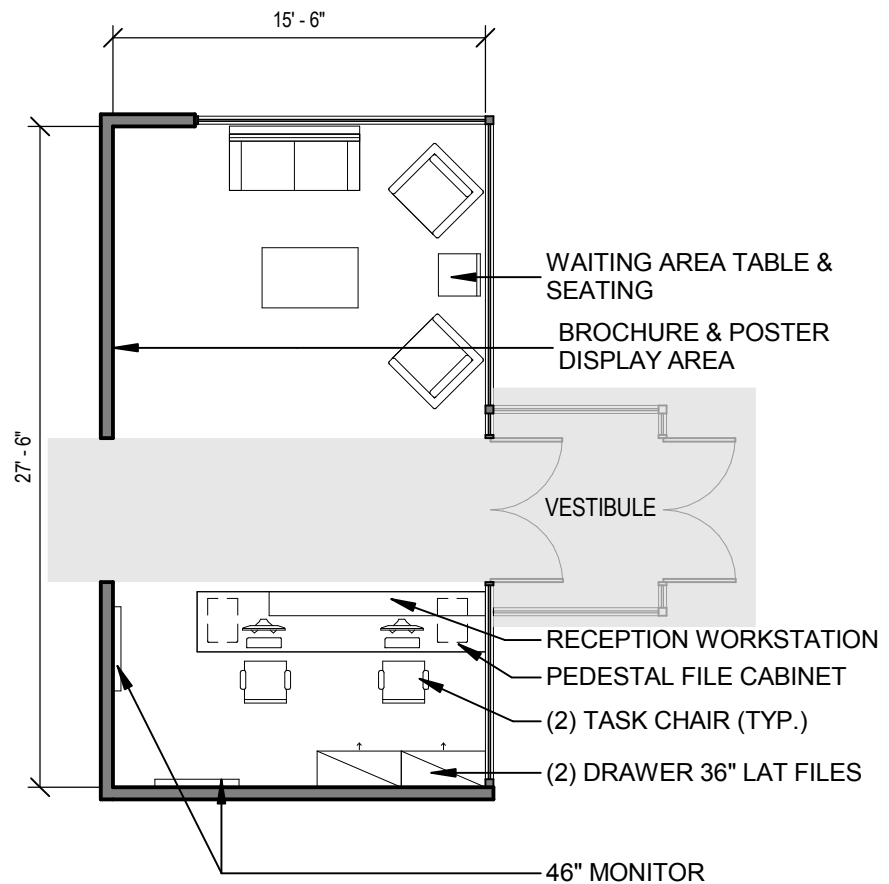
ROOM LAYOUT DIAGRAM

Administration

1.1.1. Lobby / Reception

Scale: 1/8" = 1'-0"

Net Area: 346 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration
1.1.2 Lounge

SPACE INFORMATION

Room Function: Student lounge and gathering area
Adjacencies: Computer Lab (2.1.1), Community Gathering Room (2.2.2) **Special Requirements**
Room Type: Open
Access: Public
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 120	Room/Space Quantity: 1	Total Area: 120 SF
Assigned Capacity: 0	Unassigned Capacity: 3-5 guest(s)	Total Capacity: 5

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Absorbant wall finishes
Doors:	Windows:
Type: n/a	Natural Lighting: Required
Width:	Sidelight: n/a
Height:	
Door Panel:	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: Wall mounted flat panel display(s)
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: n/a	Artificial Lighting: Direct/Indirect LED
Electrical: 120V wall outlet(s)	Telephone: n/a

EQUIPMENT AND FURNISHING

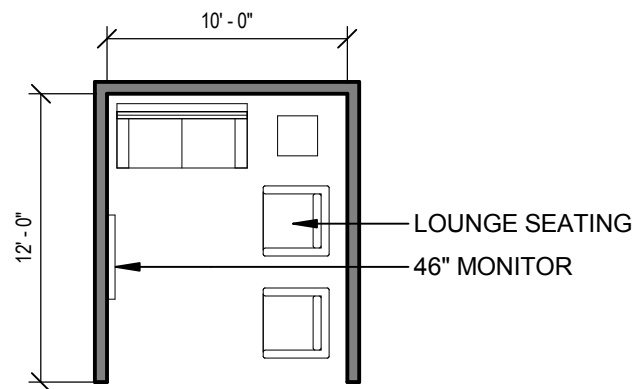
Equipment: **Furniture:**

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.1.2 Lounge

Scale: 1/8" = 1'-0"
Net Area: 120 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration
1.2.1 CCEL Office

Main Level

SPACE INFORMATION

Room Function: General CCEL Office

Adjacencies: CCEL Office Shared (1.2.2)

Special Requirements

Room Type: Private Office

Access: Staff only

Room Utilization M-F 8am-5pm

General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 120 SF

Room/Space Quantity: 1

Total Area: 120 SF

Assigned Capacity: 1 Occupant(s)

Unassigned Capacity: 2 Guest(s)

Total Capacity: 3

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: Single

Height: 84"

Width: 36"

Door Panel: Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: Vision panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: None

Wire Management: Wall outlets

Data Management: Tele/data outlet(s)

Artificial Lighting: Direct/Indirect LED and tasks lighting

Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment:

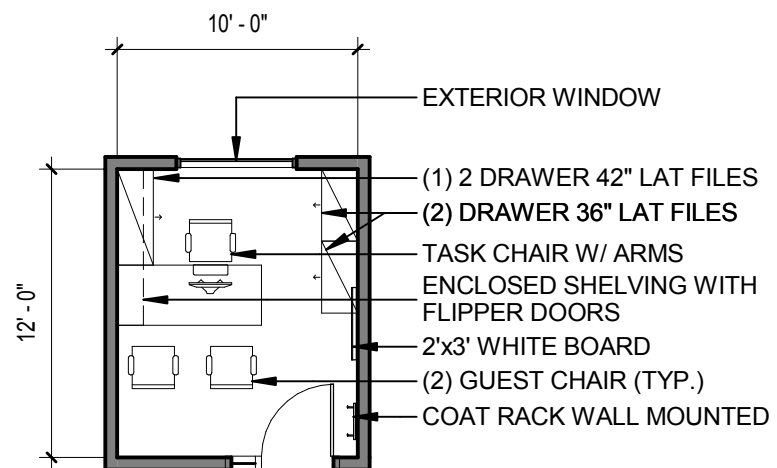
Furniture:

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.2.1 CCEL Office

Scale: 1/8" = 1'-0"
Net Area: 120 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration

1.2.2 CCEL Office Shared

SPACE INFORMATION

Room Function: Part time staff office

Adjacencies: CCEL Office (1.2.1)

Special Requirements

Room Type: Shared Office

Access: Staff & Guests

Room Utilization M-F 8am-5pm

General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 240

Room/Space Quantity: 1

Total Area: 603 SF

Assigned Capacity: 11

Unassigned Capacity: 3

Total Capacity: 14

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: 3'-6" single leaf

Height: 84"

Width: 36"

Door Panel: Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: Vision Panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: None

Wire Management: Wall outlet(s)

Data Management: Tele/data outlet(s)

Artificial Lighting: Direct/Indirect LED and task lighting

Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment:

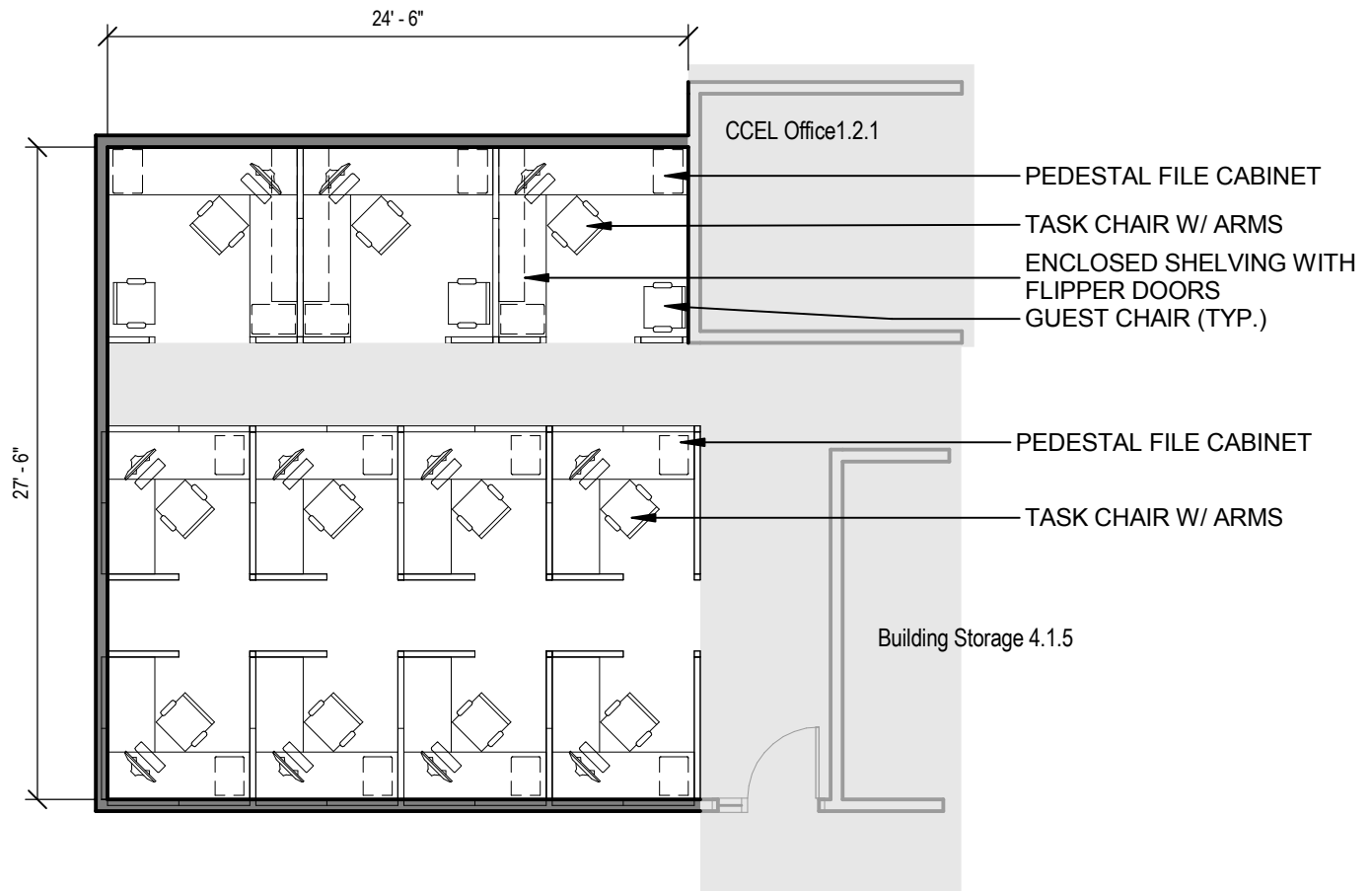
Furniture:

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.2.2 CCEL Office Shared

Scale: 1/8" = 1'-0"
Net Area: 603 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration
1.2.3 CEC Office

Main Level

SPACE INFORMATION

Room Function: General CEC Office

Adjacencies: CEC Counseling (1.2.5), Copy/Mail/Work (1.3.2)

Special Requirements

Room Type: Private Office

Access: Staff Office

Room Utilization M-F 8am-5pm

General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 120

Room/Space Quantity: 1

Total Area: 120 SF

Assigned Capacity: 1

Unassigned Capacity: 2 Guest(s)

Total Capacity: 3

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: 3'-6" single leaf **Height:** 84"

Width: 36" **Door Panel:** Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: Vision Panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: None

Wire Management: Wall outlet(s)

Data Management: Tele/data outlet(s)

Artificial Lighting: Direct/Indirect LED and task lighting

Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment:

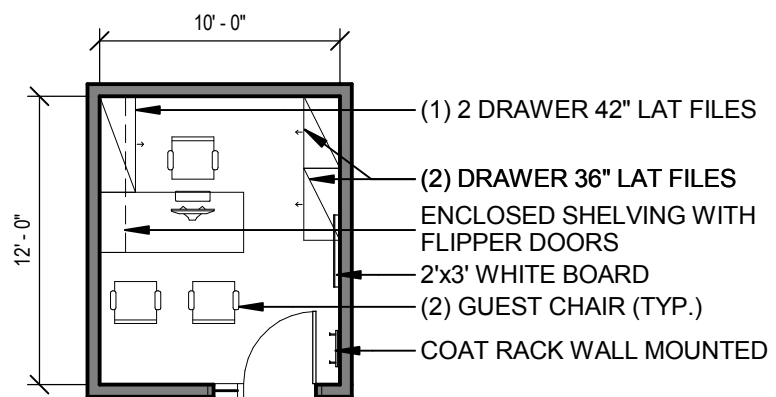
Furniture:

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.2.3 CEC Office

Scale: 1/8" = 1'-0"
Net Area: 120 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration
1.2.4 CEC Office Shared

Main Level

SPACE INFORMATION

Room Function: General COF Offices
Adjacencies: CEC Office (1.2.3), CEC Counseling (1.2.5), Conference Room (1.3.1) **Special Requirements**
Room Type: Open Office
Access: Staff only
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 635 SF	Room/Space Quantity: 1	Total Area: 657 SF
Assigned Capacity: 11 Occupant(s)	Unassigned Capacity: 7 Guest(s)	Total Capacity: 3 / 8

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: Vision panel
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: None
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED and tasks lighting
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

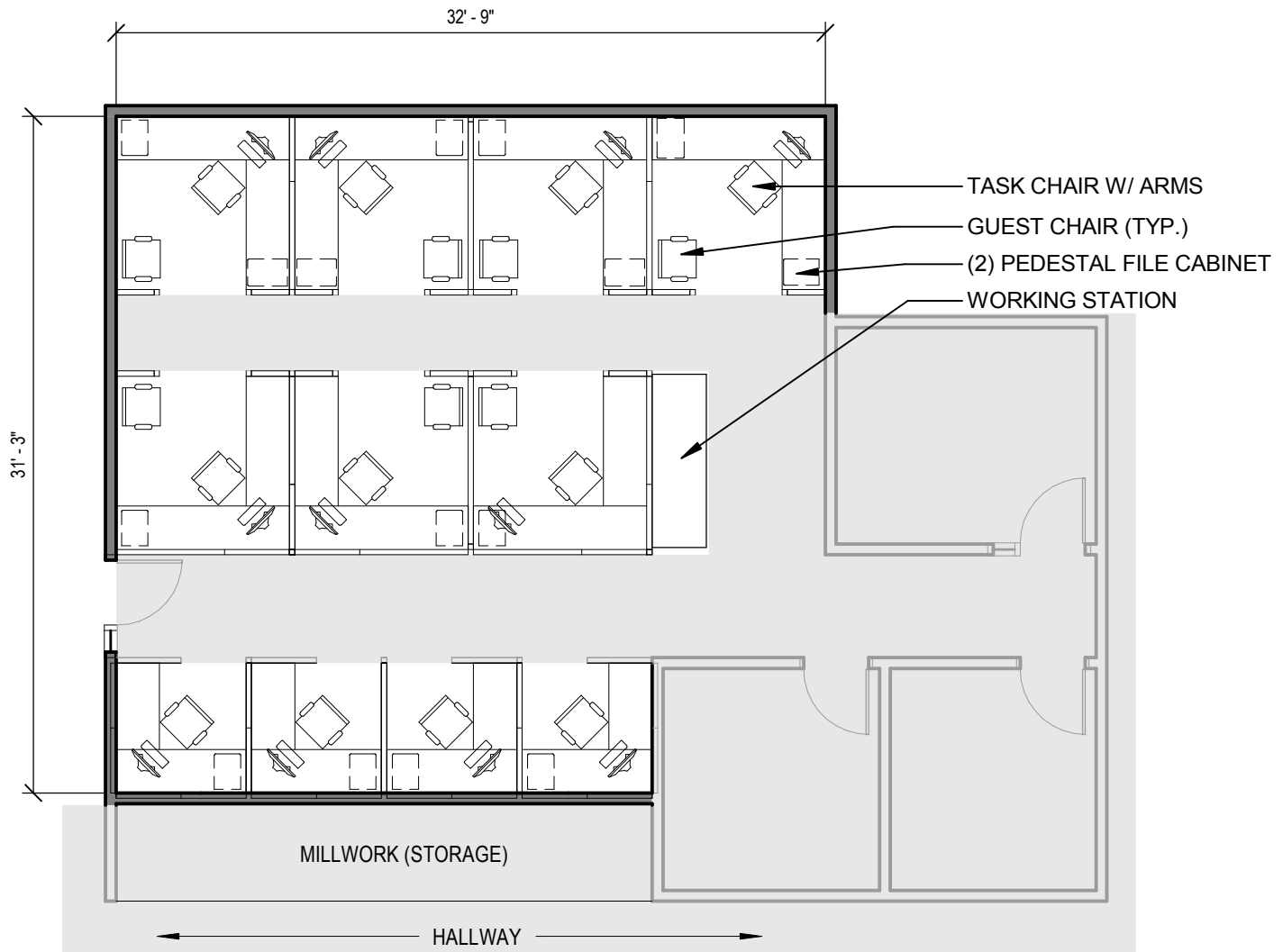
Equipment:	Furniture:
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WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.2.4 CEC Office Shared

Scale: 1'-0"
Net Area: 657 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration
1.2.5 CEC Counseling

Main Level

SPACE INFORMATION

Room Function: Meeting and counseling room
Adjacencies: CEC Office (1.2.3), Copy/Mail/Work (1.3.2) **Special Requirements**
Room Type: Private Office
Access: Staff Office
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 80	Room/Space Quantity: 2	Total Area: 81 SF
Assigned Capacity: 0	Unassigned Capacity: 5 Guest(s)	Total Capacity: 5

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: 3'-6" single leaf	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: Vision Panel
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: None
Plumbing: None	Wire Management: Wall outlet(s)
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

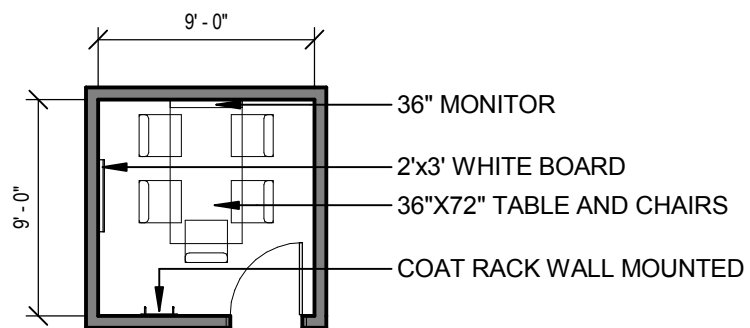
Equipment: **Furniture:**

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Administration
1.2.5 CEC Counseling

Scale: 1/8"= 1'-0"
Net Area: 81 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration

Main Level

1.3.1 Conference Room

SPACE INFORMATION

Room Function: Staff meetings, seminars, and presentations

Adjacencies: CEC Office (1.2.3), CEC office Shared (1.2.4)

Special Requirements

Room Type: Enclosed Room

Access: Staff only

Room Utilization M-F 8am-5pm

General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 320 SF

Room/Space Quantity: 1

Total Area: 324 SF

Assigned Capacity: 0 Occupant(s)

Unassigned Capacity: 16 Guest(s)

Total Capacity: 16

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: Single

Height: 84"

Width: 36"

Door Panel: Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: Vision panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: Wall mounted flat panel display & projection

Wire Management: Wall outlets

Data Management: Tele/data outlet(s) Including wall & ceiling

Artificial Lighting: Direct/Indirect LED

Telephone: Telephone jack

EQUIPMENT AND FURNISHING

Equipment:

Furniture:

WSU Community Outreach Center

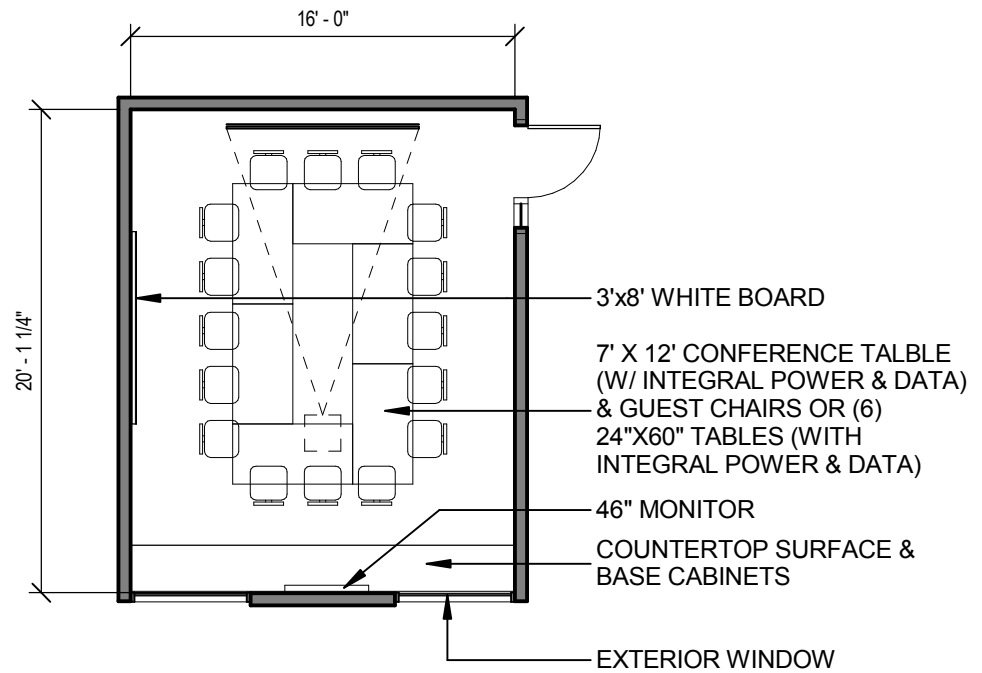
ROOM LAYOUT DIAGRAM

Administration

1.3.1 Conference Room

Scale: 1/8" = 1'-0"

Net Area: 324 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Administration

Main Level

1.3.2 Copy / Mail / Work Area

SPACE INFORMATION

Room Function: Mailroom for distribution as well as printing, scanning, and copying documents, storage of supply materials
Adjacencies: CEC Office (1.2.1), CEC Office Shared (1.2.4), **Special Requirements**
Conference Room (1.3.1)
Room Type: Enclosed Workroom
Access: Staff
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 80 SF	Room/Space Quantity: 1	Total Area: 80 SF
Assigned Capacity: 0 Occupant(s)	Unassigned Capacity: 2 Guest(s)	Total Capacity: 2

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: none
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: n/a
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: n/a
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment:	Furniture:
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WSU Community Outreach Center

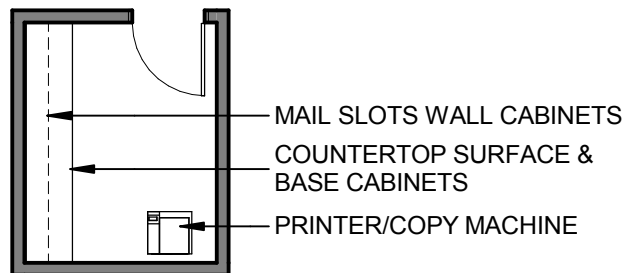
ROOM LAYOUT DIAGRAM

Administration

1.3.2 Copy / Mail / Work Area

Scale: 1/8"= 1'-0"

Net Area: 80 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Academic Instruction
2.1.1 Computer Lab

Main Level

SPACE INFORMATION

Room Function: Computer laboratory classroom
Adjacencies: CCEL Office Shared (1.2.2), Community Gathering Room (2.1.2) **Special Requirements**
Room Type: Enclosed Room
Access: Public
Room Utilization: M-F 8am-5pm
General Notes: Distance learning ready

ROOM SIZE AND CAPACITY

Proposed Area: 900 SF	Room/Space Quantity: 1	Total Area: 784 SF
Assigned Capacity: 0 Occupant(s)	Unassigned Capacity: 41 Guest(s)	Total Capacity: 41

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: n/a
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: Projection
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED
Electrical: 120V wall outlet(s)	Telephone: n/a

EQUIPMENT AND FURNISHING

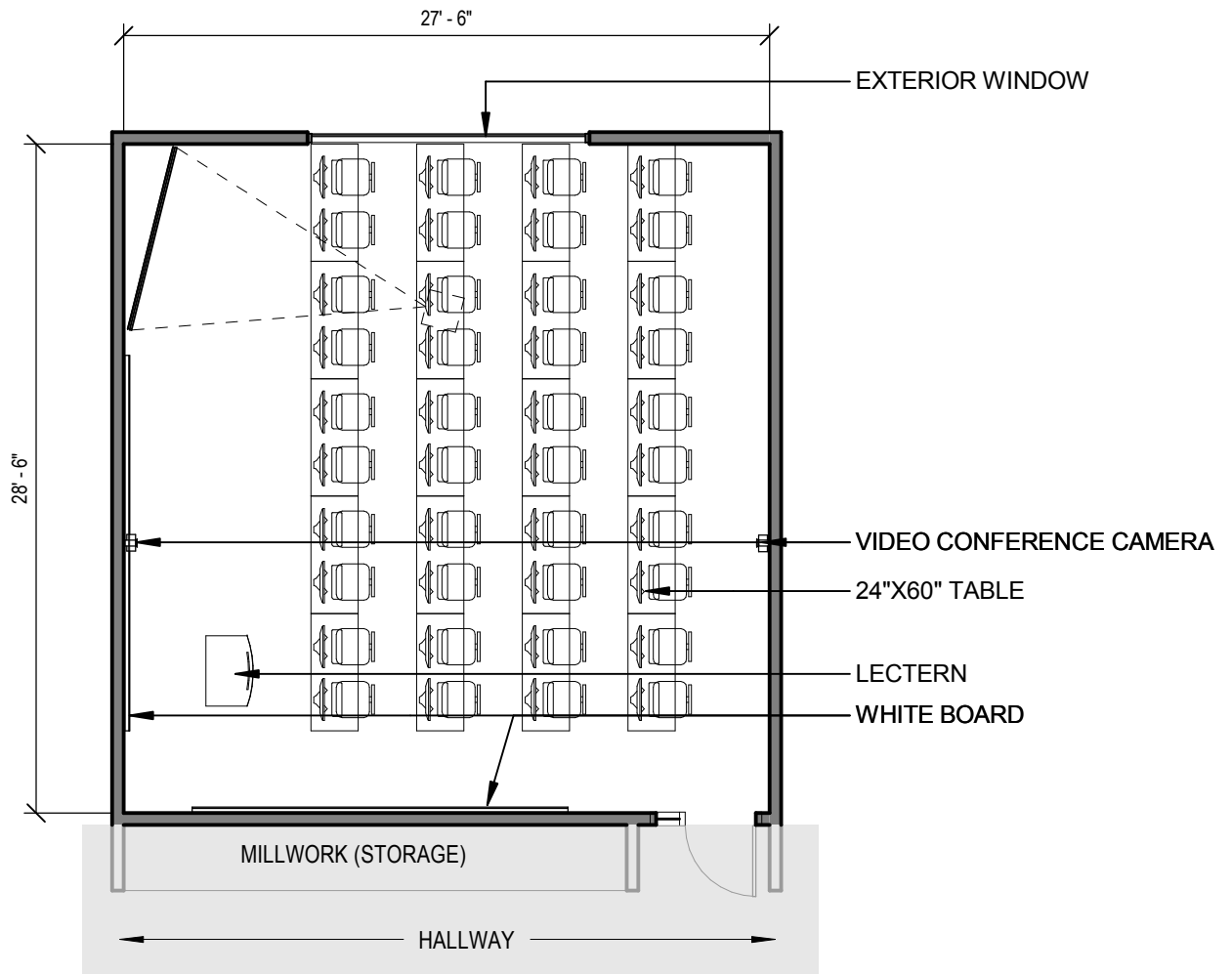
Equipment:	Furniture:
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WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Academic Instruction
2.1.1 Computer Lab

Scale: 1/8" = 1'-0"
Net Area: 784 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Academic Instruction
2.1.2 Community Gathering Room

Main Level

SPACE INFORMATION

Room Function: Community classroom

Adjacencies: Kitchen (2.2.1), Chair and table storage (2.2.2)

Special Requirements

Room Type: Enclosed Room

Access: Public

Room Utilization M-F 8am-5pm

General Notes: Distance learning ready

ROOM SIZE AND CAPACITY

Proposed Area: 2820 SF **Room/Space Quantity:** 1 **Total Area:** 2847 SF

Assigned Capacity: 0 Occupant(s) **Unassigned Capacity:** 114 Guest(s) **Total Capacity:** 114

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: Single

Height: 84"

Width: 36"

Door Panel: Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: n/a

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: Projection

Wire Management: Wall outlets

Data Management: Tele/data outlet(s)

Artificial Lighting: Direct/Indirect LED

Telephone: n/a

EQUIPMENT AND FURNISHING

Equipment:

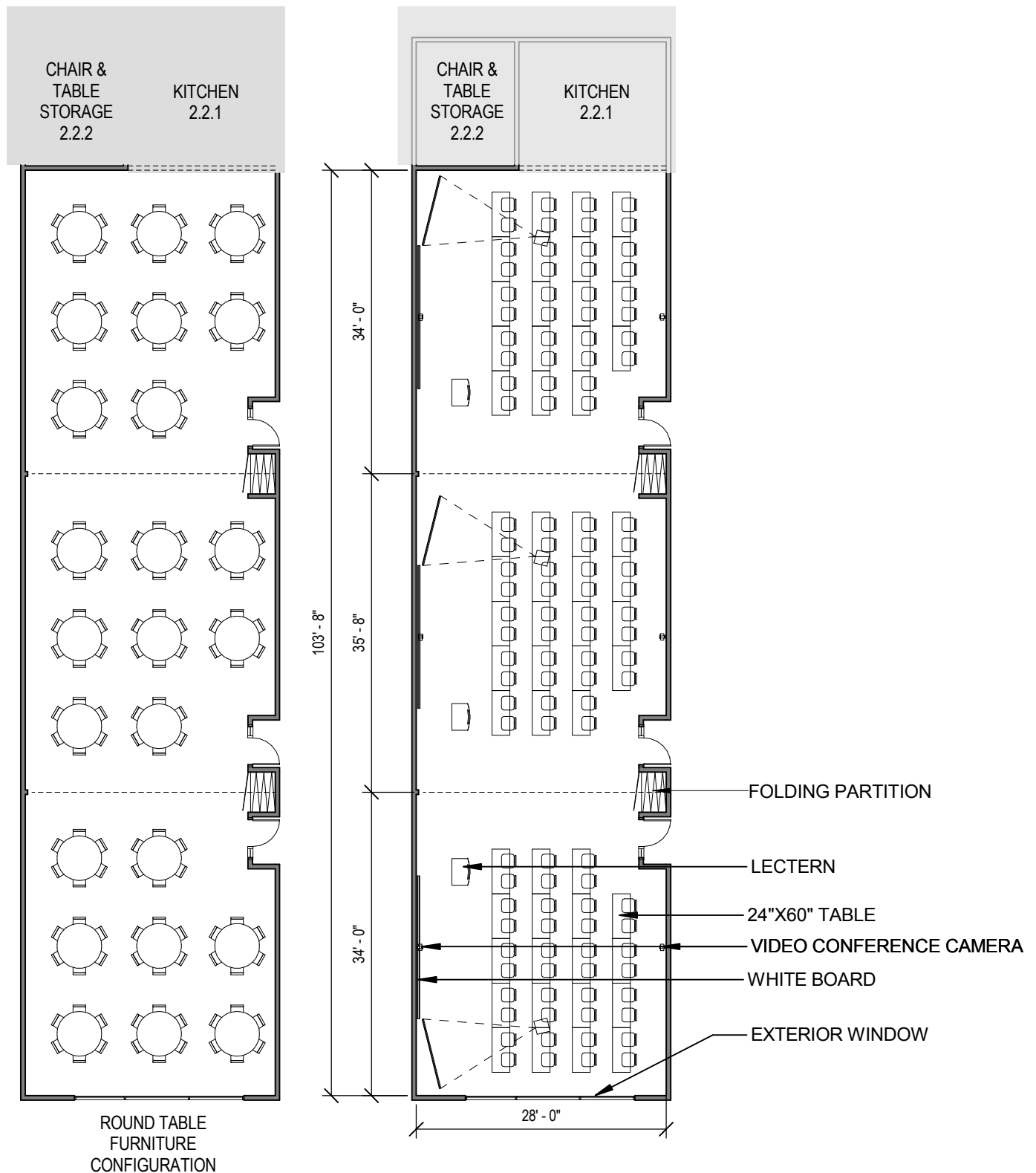
Furniture:

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Academic Instruction
2.1.2 Community Gathering Room

Scale: 1/16"= 1'-0"
Net Area: 2847 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Academic Instruction
2.2.1 Kitchen

Main Level

SPACE INFORMATION

Room Function: Community Gathering Room Kitchen; Building Breakroom
Adjacencies: Community Gathering Room (2.1.2); Chair & Table Storage (2.2.2) **Special Requirements**
Room Type: Open
Access: Public
Room Utilization: M-F 8am-5pm
General Notes: Open to Community Gathering Room

ROOM SIZE AND CAPACITY

Proposed Area: 225 SF	Room/Space Quantity: 1	Total Area: 225 SF
Assigned Capacity: 0	Unassigned Capacity: 4 Guest(s)	Total Capacity: 4

FINISHES, DOORS, AND WINDOWS

Floor Finish: Tile	Ceiling Treatment: Gypsum Board
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: n/a
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: n/a
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: n/a
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED
Electrical: 120V wall outlet(s)	Telephone: n/a

EQUIPMENT AND FURNISHING

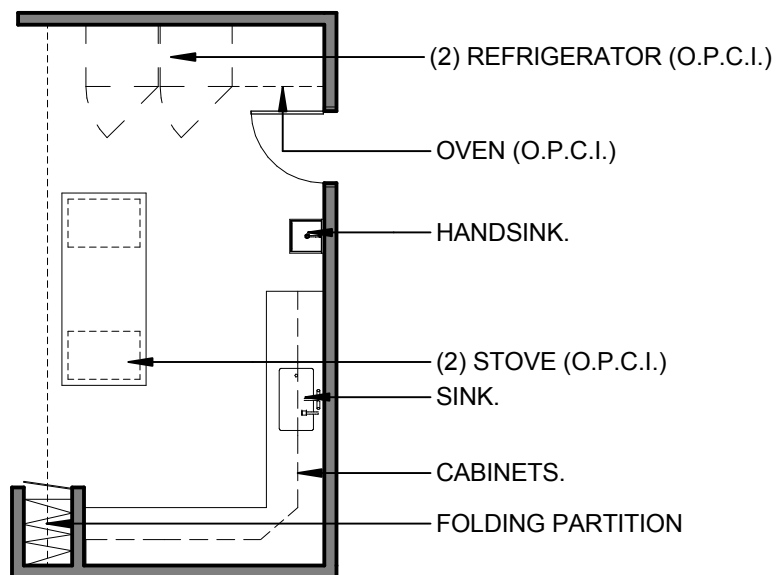
Equipment:	Furniture:
	Campus Standard Office

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Academic Instruction
2.2.1 Kitchen

Scale: 1/8"= 1'-0"
Net Area: 225 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Child & Family Studies
3.1.1 Office

Main Level

SPACE INFORMATION

Room Function: General Child & Family Studies Office
Adjacencies: Classroom Restrooms (3.1.2), Childcare Room 3.1.3 **Special Requirements**
Room Type: Private Office
Access: Staff only
Room Utilization: M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 120 SF **Room/Space Quantity:** 1 **Total Area:** 120 SF
Assigned Capacity: 1 Occupant(s) **Unassigned Capacity:** 2 Guest(s) **Total Capacity:** 3

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single Height: 84"	Natural Lighting: Preferred, glare and brightness control
Width: 36" Door Panel: Solid	Sidelight: Vision panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: None
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED and tasks lighting
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

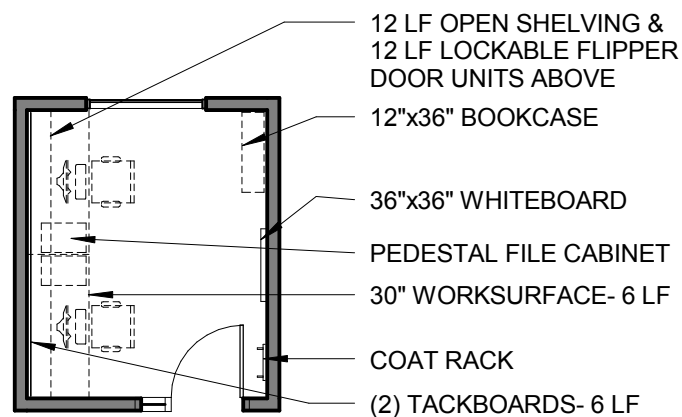
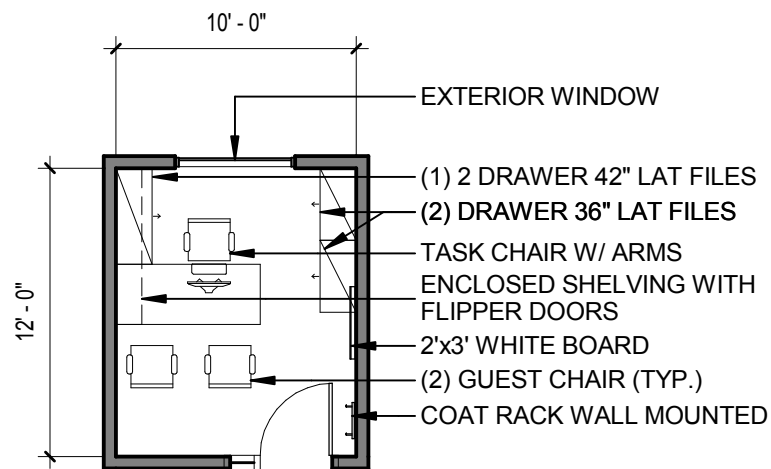
Equipment: **Furniture:**

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Child & Family Studies
3.1.1 Office

Scale: 1/8"= 1'-0"
Net Area: 120 SF



ALTERNATE FURNITURE OPTION

WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Child & Family Studies
3.1.3 Childcare Room

Main Level

SPACE INFORMATION

Room Function: General Child & Family Studies Office
Adjacencies: Office (3.1.1), Classroom Restrooms 3.1.3, Storage Prep and **Special Requirements**
Observation (3.1.4)
Room Type: Enclosed Room
Access: Public
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 700 SF	Room/Space Quantity: 1	Total Area: 709 SF
Assigned Capacity: 22 Occupant(s)	Unassigned Capacity: 0 Guest(s)	Total Capacity: 22

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: Vision panel
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: None
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED and tasks lighting
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

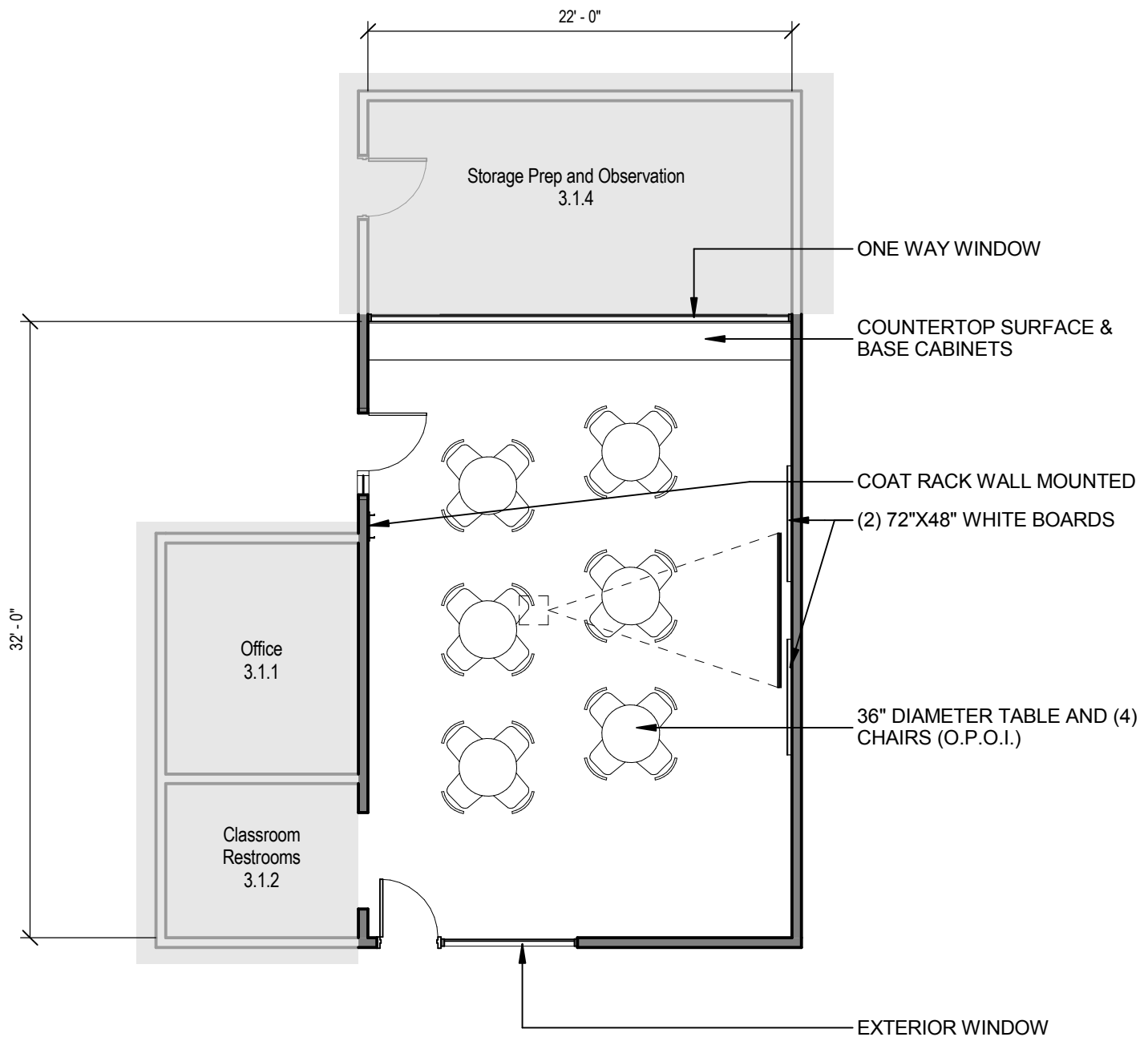
Equipment:	Furniture:
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WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Child & Family Studies
3.1.3 Childcare Room

Scale: 1/8" = 1'-0"
Net Area: 709 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Child & Family Studies

Main Level

3.1.4 Storage Prep and Observation

SPACE INFORMATION

Room Function: General Child & Family Studies Office

Adjacencies: Childcare Room (3.1.3), Childcare Support (3.1.5)

Special Requirements

Room Type: Enclosed Room

Access: Public

Room Utilization M-F 8am-5pm

General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: 180 SF

Room/Space Quantity: 1

Total Area: 213 SF

Assigned Capacity: 0 Occupant(s)

Unassigned Capacity: 3 Guest(s)

Total Capacity: 3

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet

Wall Finish: Gypsum board (painted)

Base Finish: Rubber

Doors:

Type: Single

Height: 84"

Width: 36"

Door Panel: Solid

Ceiling Treatment: Suspended acoustical lay-in tiles

Ceiling Height: 9' minimum

Acoustic Treatment: Provide privacy from adjacent spaces

Windows:

Natural Lighting: Preferred, glare and brightness control

Sidelight: Vision panel

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System

Plumbing: None

Fire Protection: Sprinkler

Security: Keyed lock at entrance door(s)

Electrical: 120V wall outlet(s)

AV Requirements: None

Wire Management: Wall outlets

Data Management: Tele/data outlet(s)

Artificial Lighting: Direct/Indirect LED and tasks lighting

Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

Equipment:

Furniture:

WSU Community Outreach Center

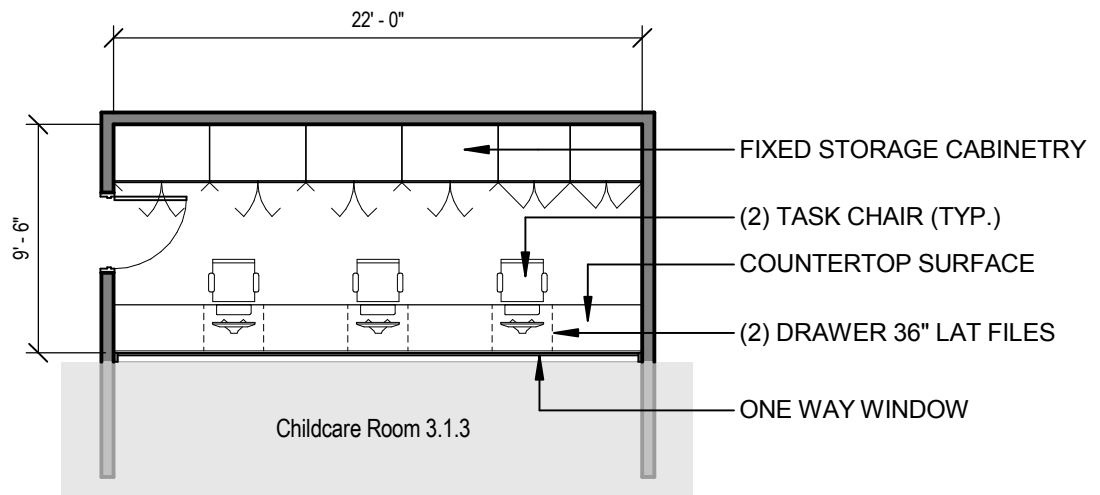
ROOM LAYOUT DIAGRAM

Child & Family Studies

3.1.4 Storage Prep and Observation

Scale: 1/8"= 1'-0"

Net Area: 213 SF



WSU Community Outreach Center

ROOM DATA SHEET DETAIL

Child & Family Studies
3.1.5 Childcare Support

Main Level

SPACE INFORMATION

Room Function: General Child & Family Studies Office
Adjacencies: Office (3.1.1), Childcare Room (3.1.3), Storage Prep and Observation (3.1.4) **Special Requirements**
Room Type: Enclosed Room
Access: Public
Room Utilization M-F 8am-5pm
General Notes:

ROOM SIZE AND CAPACITY

Proposed Area: SF 130 **Room/Space Quantity:** 1 **Total Area:** 136 SF
Assigned Capacity: 0 Occupant(s) **Unassigned Capacity:** 3 Guest(s) **Total Capacity:** 3

FINISHES, DOORS, AND WINDOWS

Floor Finish: Carpet	Ceiling Treatment: Suspended acoustical lay-in tiles
Wall Finish: Gypsum board (painted)	Ceiling Height: 9' minimum
Base Finish: Rubber	Acoustic Treatment: Provide privacy from adjacent spaces
Doors:	Windows:
Type: Single	Natural Lighting: Preferred, glare and brightness control
Height: 84"	Sidelight: Vision panel
Width: 36"	
Door Panel: Solid	

MECHANICAL/ELECTRICAL

HVAC: High-Efficiency Multi-Zone Ductless System	AV Requirements: None
Plumbing: None	Wire Management: Wall outlets
Fire Protection: Sprinkler	Data Management: Tele/data outlet(s)
Security: Keyed lock at entrance door(s)	Artificial Lighting: Direct/Indirect LED and tasks lighting
Electrical: 120V wall outlet(s)	Telephone: Wall mounted telephone jack

EQUIPMENT AND FURNISHING

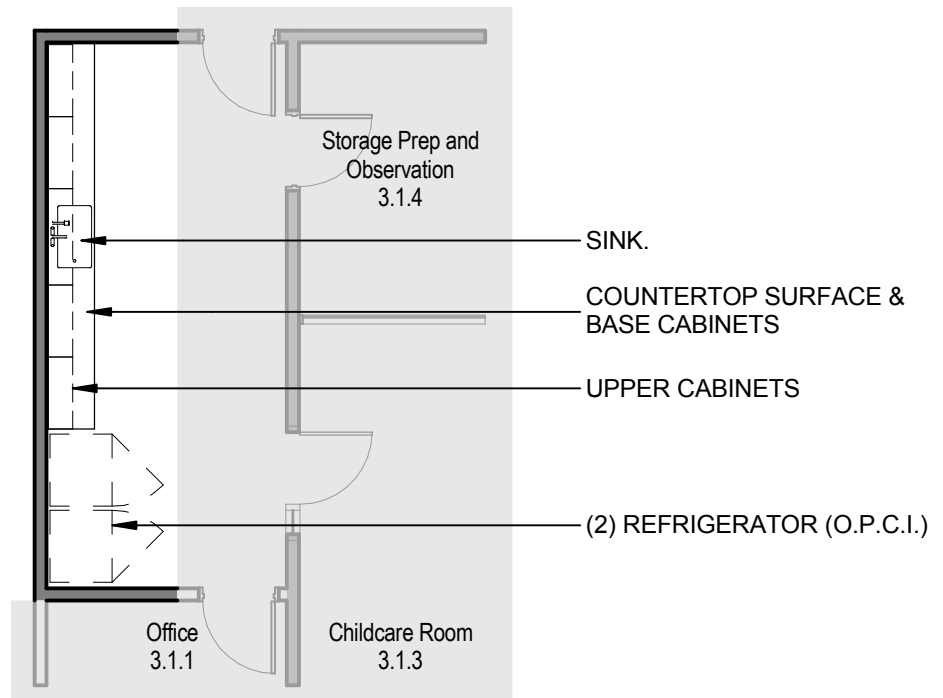
Equipment: **Furniture:**

WSU Community Outreach Center

ROOM LAYOUT DIAGRAM

Child & Family Studies
3.1.5 Childcare Support

Scale: 1/8" = 1'-0"
Net Area: 136 SF



SECTION 4

BUILDING & SITE RESPONSE

4.1 Existing | Peer Facilities Analysis

The Community Education Center is currently housed at The Red Cross Building at 2955 Harrison Boulevard in Ogden, Utah. While the current facility is serving its purpose, it was not a leading example to base future planning and design of the Community Outreach Center around. Instead of a thorough existing conditions analysis, the programming team was able to visit other WSU Continuing Education facilities and peer facilities. These spaces ranged from free standing buildings, to lease space to programs housed within other public buildings – such as the University of Utah’s Community Learning Center housed within the Glenwood Middle School. Each provided key information to the development of this program.

The Community Outreach Center will consist of multiple groups providing services to students and the community at large. As part of its review of the space needs, the team consulted with staff to determine each room’s intended and actual function, its social organization, and its service characteristics. While these discussions typically began with the client’s existing facilities, the focus soon shifted to planning for their future needs and desires, including reorganization, opportunities for outreach and collaboration, and the size, function, and natural affinities of their spaces. These forward-thinking concepts were tested and later incorporated into early planning graphics, room data sheets, and affinity diagrams, and then reviewed by the staff during a subsequent workshop held in March 2016. Concurrently, mechanical, electrical, structural, audio/visual and information technology consultants assessed the needed infrastructure, interviewed project goals with WSU facilities personnel and made recommendations for the new building. A cost model was developed to help the Executive Committee establish its priorities and draft a final budget.

Much of the programming team’s work hinged on planning a facility capable of serving the university well for a number of decades. The following section discusses that vision and the challenges associated with making it a reality.

4.2 New Building

4.2.1 Community Outreach Center Project Concept

The team held the Vision Session Workshop with the Executive Committees intended to begin background discussions about the broader vision for the Community Outreach Center project. The programming team held a forum with the project leadership to determine their goals and values.

In an important exercise, the team presented a series of images and asked the committees to choose those which best represented the values important to the project’s future users. The committees openly deliberated these images and their inherent qualities and attributes. Each of the images that were chosen evoked different words and ideas depending on the person, but

taken together they describe the group's aspirations for Community Outreach Center Project. The programming team then translated these ideas into a series of site and facility responses, outlined here.

4.2.2 Function and Building Design

The Community Outreach Center Program is intended to support the building's role as a hub for academic instruction and community engagement. This is a complex task, given that several distinct user groups share the building, each having different and occasionally conflicting requirements. Center stakeholders had to agree on functional and building design priorities in order to successfully meet the needs of the building's diverse users while still putting the students' interests first.

Concerns over public access to the Center and the importance of creating the main entry at the corner of Monroe Avenue and 26th Street was a key topic. The Community Outreach Center supports the administration's desire that center create an inviting entrance supported by the facilities architecture, location of the building entry and lobby, and development of an exterior plaza. As such, the program has evolved to develop a public presence on Monroe Avenue and create an outdoor gathering area off of the Community Gathering Room to the south. By demarcating facility functions in this way, the program tips its hat to both community engagement and developing critical outdoor gathering space away from traffic.

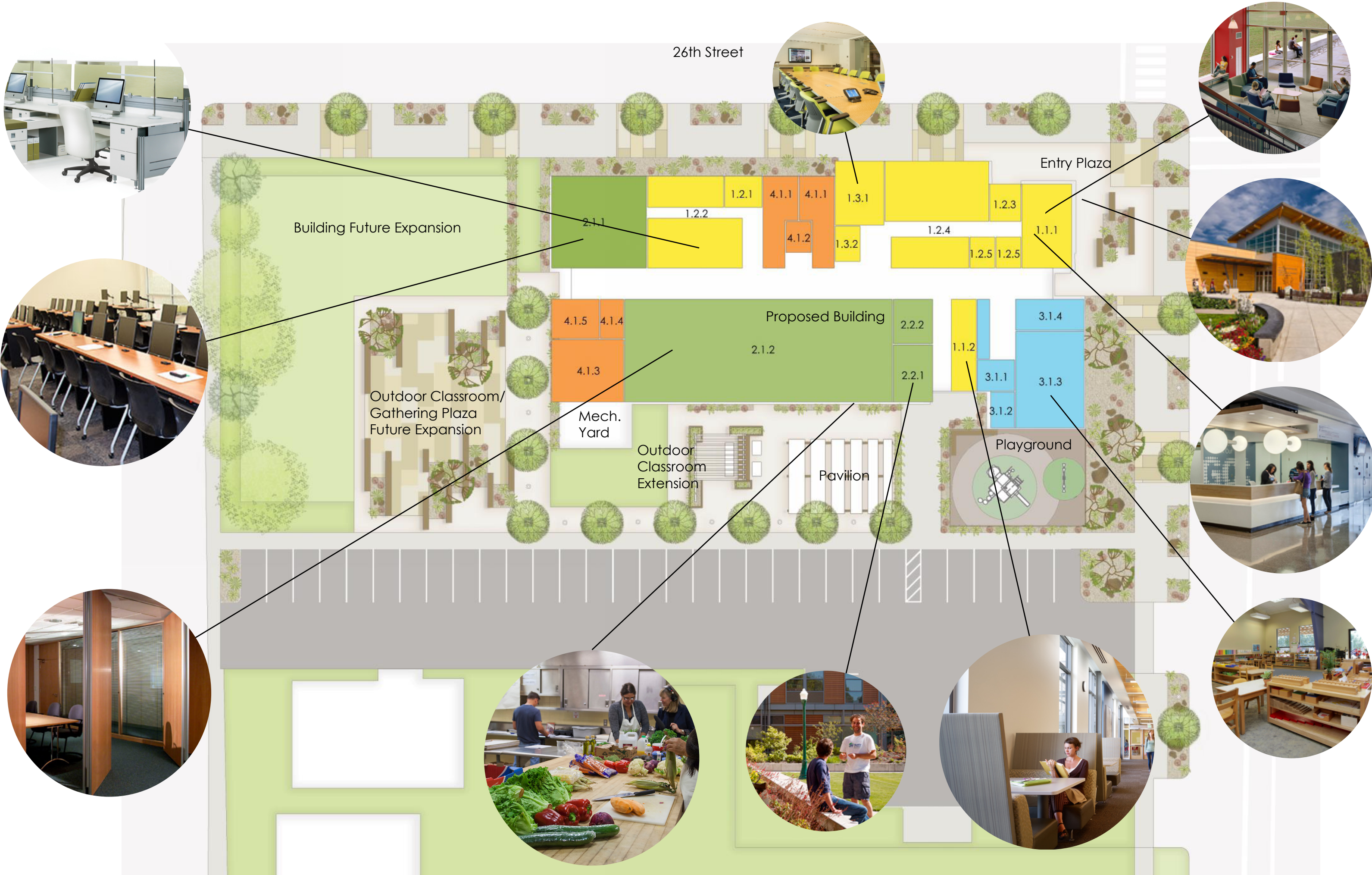
4.2.3 Features

Designing the Community Outreach Center will require a deep understanding of both the project vision and the subsequent building program. The following is a contextual analysis of the architectural expression guiding this program and the conceptual designs prepared during the programming phase.

Image

Set at the corner of Monroe Avenue and 26th Street, the Community Outreach Center project must seize every opportunity to reflect the building's context, use, and purpose. In addition to its practical functions, the Center will also become an icon for the neighborhood. It is a project goal that the Center be the first stop for prospective students; its image must effortlessly communicate its qualities as a collaborative, open and engaging resource to the first-time visitor. It must be both grounded in the history of WSU and fitting for the neighborhood.

The building's simple mission provoked the programming team to give serious thought to the Center's image in their early conceptual design schemes. The project's program elements include academic instruction areas – Community Gathering Room and Computer Lab / Classroom, administrative staff work areas – for CEC and CCEL, Children's Center suite and building support spaces. Each of these programmatic elements requires a distinct architectural response to such variables as interior finish, lighting, technology, acoustic control, visual access,



or placement in relation to main routes of circulation. Collectively, these building elements must read as a community in concert with overall plan.

Participants in the programming process made modest requests, acknowledging the need to balance their desires for excellence and innovation with the reality of limited funds, yet all were clear in their desire for a notable and responsive facility. Administrators and faculty requested an iconic structure demonstrating excellence in character, efficiency, and comfort. They asked for a building where students could build community, find academic resources, and seize opportunities for collaboration.

The team informally interviewed a number of students during the programming process. Primarily, they requested spaces that would be inviting, collegiate, and comfortable. They desired an engaging resource to support their learning, a facility with accessible physical and digital resources, and easy traffic through the building. They also requested access to food, places for cooking, and versatile spaces to cultivate lifelong friendships.

Flexibility

WSU has a history of adapting well to new trends in teaching, learning and business. The Community Outreach Center project can reflect this receptiveness to change. Over the building's future life, academic pedagogy will continue to shift. The team has worked to design opportunities for flexibility into the project. The team adopted an approach for flexible and modular work environments. Building systems design will also focus on flexibility, including expandable or plug-and-play mechanical zones, and thoughtful electrical distribution systems.

Circulation and Access

At approximately 12,000 square feet, the Community Outreach Center will play a significant role for WSU in the community. Understanding the building's limited size, the design team will work to accentuate and develop the facilities presence and accessibility. This will mean designing the building to accommodate multiple entrances, easy circulation both to and through the building, and to respond to community context.

Corner Plaza and Entry

Pedestrian access to and through the site must accentuate primary and secondary building entrances and allow for the use of outdoor spaces adjacent to the building. The building should serve as a destination at the corner of Monroe Boulevard and 26th Street. The site must be designed to direct building users to the front entry via sheltered routes, and provide informal seating areas outside the building. Project signage will be developed as a set of monument signs or a combination of on building and site anchored signage.

Children's School Playground

Delivery access and accessible parking must be consolidated and well-organized along the south edge of the site to allow for future Center expansion to the west. A refuse/recycling area and any ground mounted utilities located adjacent to the building or within the parking lot, but must be screened. Noise from exterior mounted mechanical units must be planned for.

Security

Safety and security for building users and the building itself must be considered for the Community Outreach Center. The planning and design process should incorporate discrete and unobtrusive security measures and Crime Prevention Through Environmental Design (CPTED) principles.

The building may have security cameras tied to the campus security office and proximity locks. Additional security measures in the project may include:

- Natural Access Control with real or symbolic barriers, appropriate lighting; guards or staff at access points;
- Natural Surveillance with formal or informal patrols; full-height glazing of sidelights at conference rooms, door glazing for entrances; equipment such as mirrors, fritted and one-way glass doors;
- Territorial reinforcement via the proper location and orientation of administrative staff; a sense of ownership by the staff; user ownership developed through proactive assistance and name recognition;

Whereas the site indicated in the conceptual design suggests the potential for multiple entrances to the building itself, it is important that the public entrances are highlighted architecturally. Entrances with secured access, requiring proximity locks or keyed access, should have signs to direct users to public access points and points of assistance.

Connectivity / Technology

In an era of exponential change, the Community Outreach Center must demonstrate as much technological flexibility as the budget will allow. Academic facilities face the daunting challenges of managing vast amounts of information at record speed. As student records, enrollment information, and even academic course work becomes increasingly available on networked electronics, the amount of data that must be created, transmitted managed and stored has grown dramatically. The design team must work closely with campus IT to tackle issues of digital connectivity, student records management, storage requirements, long-distance education, and as desired IP integration. The design team will work within WSU's standardized cabling requirements to address typical building operations. Telecommunications rooms, run distances, and pathways will be closely coordinated.

Access and Logistics

On the ground plane, there is limited landscape elements at the building's perimeter to be retained, less a number of street trees along the site's western edge. Twelve foot deep landscaped areas sit between the back of curb and side walk along Monroe and 26th Street. A large signal standard is located on the northeast corner of the site.

Two new ground level entrances, one on the northeast corner of the building and the other south façade adjacent to the parking lot, will develop ground plane connectivity to and through the building. These entrances should include limited outdoor seating and new landscaping compatible with the rest of site. Site lighting and signage should support the overall building and campus aesthetic.

The building will also be supported by active, outdoor community gathering spaces adjacent to the two main building entrances that support informal gathering. In addition, an outdoor patio area will be located off of the Community Gathering Room. A fully-enclosed outdoor play ground is required for the Children's School and must be immediately adjacent to the classroom.

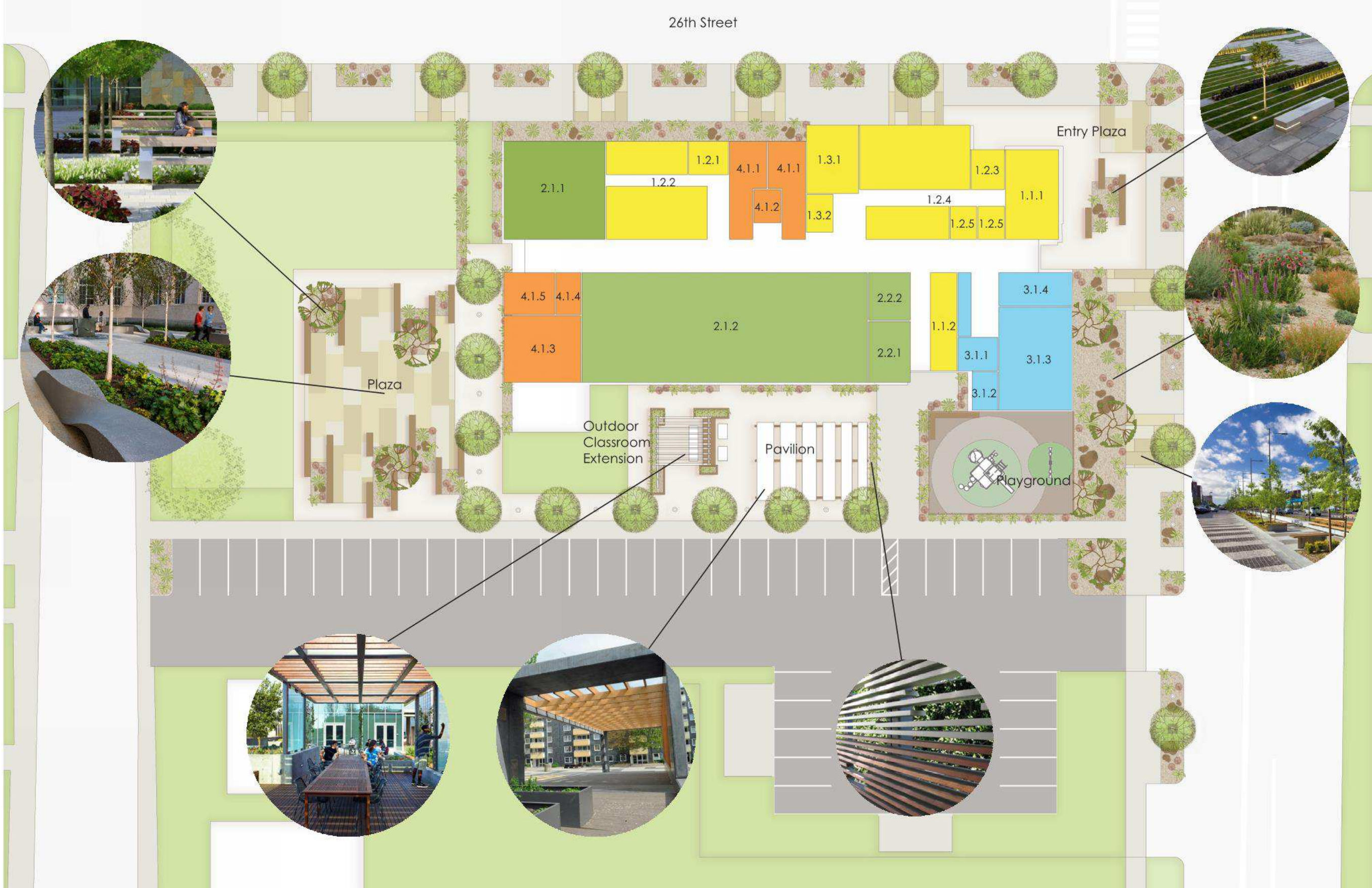
Future building expansion should be planned for the remaining site west of the Community Outreach Center. Proposed uses of the available site have been discussed in the planning process and may consist of a play field, naturalized landscape or community garden. The development of this area will be further defined during the design phase.

Landscaping

The new landscape design should include both hard and softscape design. It should incorporate water-conserving and sustainable practices while matching the character of WSU landscapes.

Specific landscape recommendations include incorporating water-conserving planting such as native and adaptive vegetation, using mulch in planting beds to conserve water, and using boulders and other un-irrigated landscape features to limit turf areas where possible. However, turf is desired at and around public entries and plazas as they allow for limited paved access routes and provide overflow seating and activity areas.

Landscape strategies should be carefully coordinated with WSU Grounds. These strategies should encourage groundwater return, stormwater runoff mitigation, and other sustainable landscape design features. Plantings should be used to screen prevailing winds and shade the building and outdoor gathering / play area in the summer. They should also be used to screen unattractive views, create human scale in exterior spaces, and shade hardscaped zones. Outdoor seating and site furnishings should be provided to make exterior spaces useable. Appropriate pedestrian connections and walkways should be considered to create sensible connections to other areas of campus.



4.2.5 Energy, Environment and Resource Conservation

Project Goals

The construction of the Community Outreach Center should minimally impact the environment, reduce the use of energy and natural resources, and lower lifecycle costs for building materials and systems. The project should follow goals established by this project, WSU Design Guidelines and DFCM High Performance Standards. The program has incorporated principles of sustainability, environmental quality, resource conservation, and energy efficiency, while maintaining a reasonable project cost.

Specific sustainability goals include: improving the energy efficiency of the building envelope by improving the thermal boundary, complete envelope design, quality glazing, and added insulation. This will maximize the usable life of the structure.

WSU Sustainability Goals

In 2007 WSU became an American College and University President's Climate Commitment (ACUPCC) signatory. LEED Silver is the campus standard for new construction for larger projects. The WSU Facilities team has decided to utilize LEED as a design guide, but not formally seek certification for this project. Specific credits of importance are summarized below and a more thorough definition can be found in the program appendix and should be used as a guide during the design phase.

Recommendations

The following are measures the programming team recommends to the designers in order to achieve building sustainability. Most of these concepts are drawn from the U.S. Green Building Council's LEED certification rating system and with WSU's input.

Sustainable Sites Development

- Plan for connectivity to public transportation
- Vegetated open space
- On-site storm water management
- Light colored roofing
- Trees to shade paved areas, where possible
- Site lighting with no up-light components
- Light colored paving

Water Conservation

- Drought tolerant plantings native and adaptive plant materials as approved by WSU Grounds
- High-efficiency landscape irrigation technology

- Low flow toilet fixtures

Energy and Environmental Conservation

- Non-CFC refrigerants
- Maximum use of outside air for cooling wherever possible
- Automatic dimming of electric lights tied to daylight sensors
- Reduced ambient light levels with supplemental task lighting
- Occupant sensors
- Increase building insulation and sound reduction
- High-efficiency motors
- Variable frequency drives
- Seal building envelope in areas affected by construction activities
- Best Practice Commissioning: rigorous verification that the building is designed, constructed, and calibrated to operate as intended

Renewable and Responsible Materials

- Storage and collection of recyclables
- Construction waste management – look for opportunities for construction salvage or recycling
- Recycled content of construction materials – as much as possible
- Local/regional sourced materials – to minimize transportation impacts

High-Quality Indoor Environment

- Carbon-dioxide monitoring in appropriate areas
- Construction Indoor Air Quality Management Plan
- Two-week post construction building flush out
- Low-VOC adhesives, sealants, paints and coatings
- Carpet, pad and adhesives with minimum off-gassing
- Wood and natural products with no added urea-formaldehyde
- Vented janitorial closets, bathrooms, copy rooms & chemical use rooms, with appropriate drainage for disposal of wastes
- Increase access to daylight in as many occupied spaces as possible
- Shade devices on fenestration to mitigate glare and summer heat

SECTION 5 BUILDING SUPPORT**5.1 Civil / Utilities****5.1.1 General**

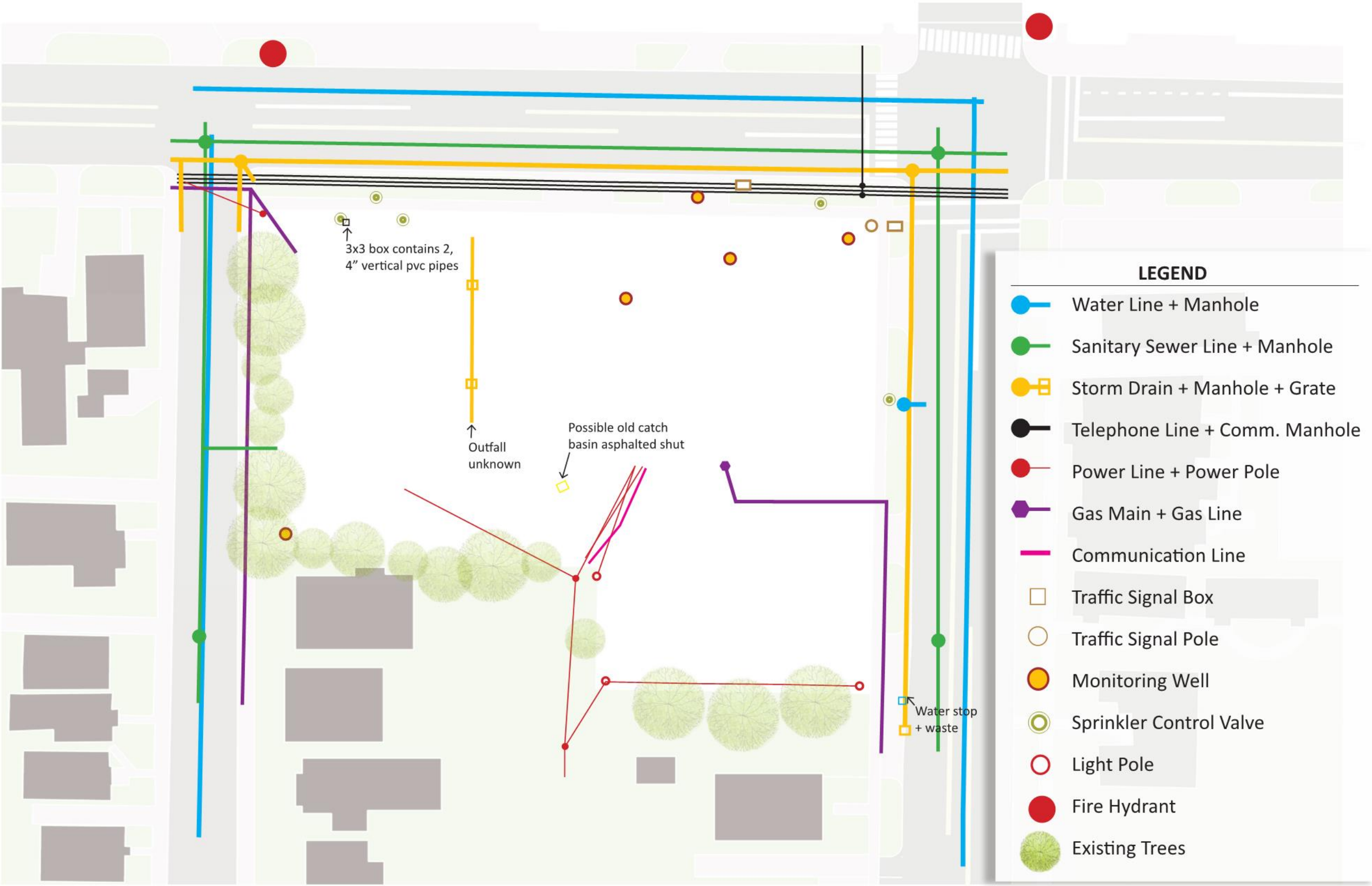
The Weber State University Community Outreach Center is located on the southwest corner of Monroe Blvd and 26th Street in Ogden, Utah. The existing facility on the site included a service station and a 10,000 square foot light commercial building. The existing buildings on the site have typical utility services that can be utilized. However, there is some site mitigation that will be necessary due to the service station. All existing buildings on the site will be demolished. Existing site utilities (water, sewer, stormwater, natural gas, power, and communications) will be revised to accommodate the proposed site layout. Parking Lots, walkways and planters around the building will be installed to comply with Ogden City Standards. In addition, the following site revisions are recommended.

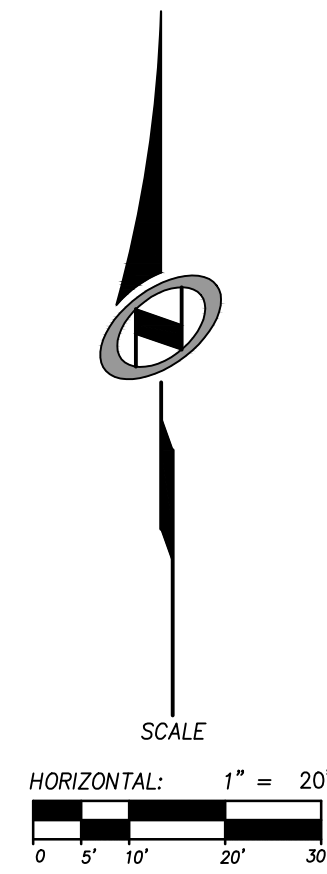
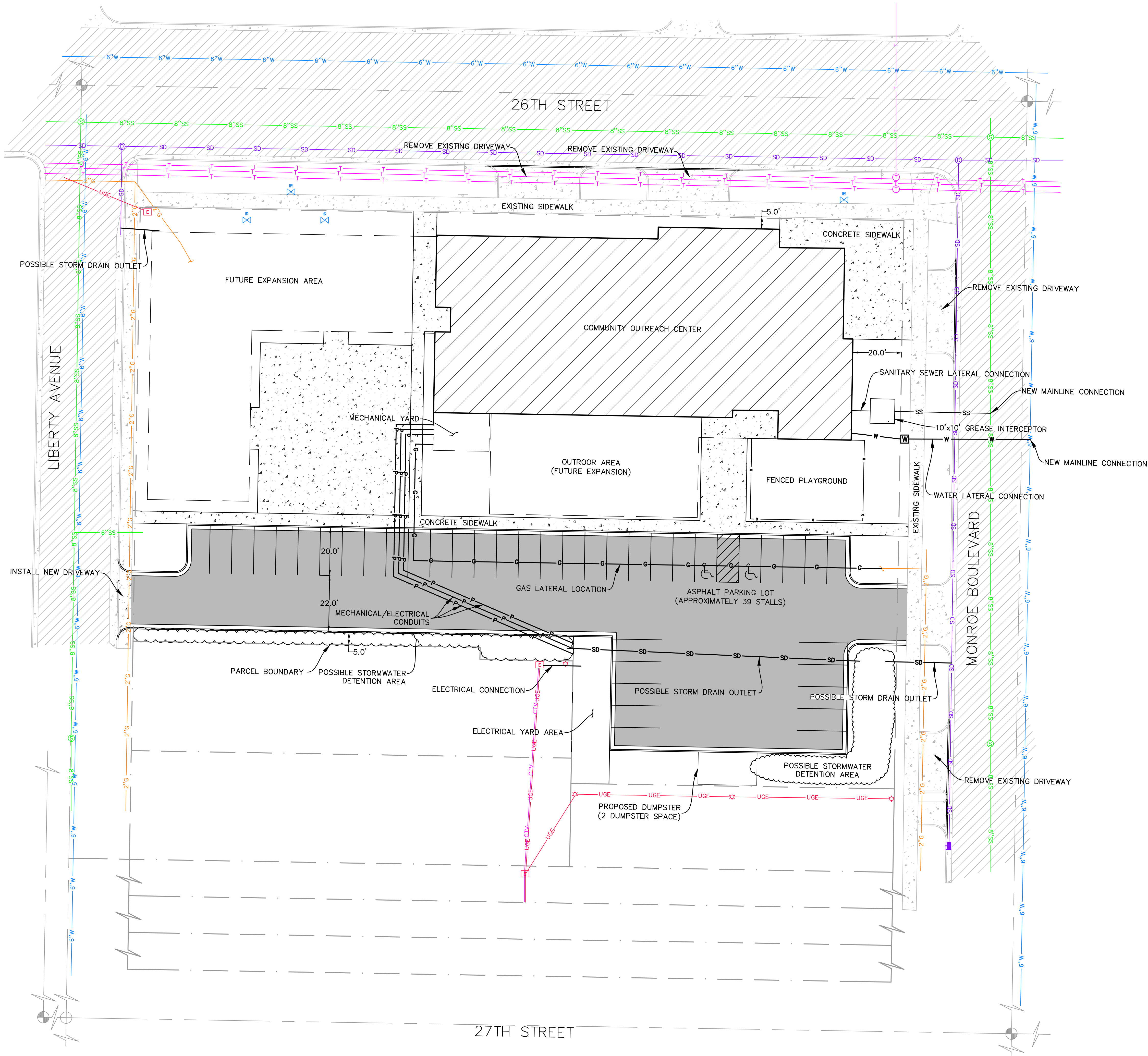
- Removal of old driveways and installation of a new one.
 - The driveways on the northeast portion of the site should be removed since the building will cut off these access points.
 - A new driveway should be installed on the west side of the site to provide a second access to the parking area south of the new building and future expansion area.

5.1.2 Existing Site Utilities

- Utility Considerations:
 - Sanitary Sewer – The parcel has 8” mainlines on three sides (North, West, East) the mainline appear to be 11’-12’ below grade. The mainline size is typical of a primarily residential, urban area. System capacity is anticipated to be sufficient
 - Culinary Water – The parcel has 6” mainlines on three sides. Current mainline standards require 8” mainlines. However, this is an area of old development and smaller mainlines are to be expected. Capacity issues are not anticipated at this time.
 - Storm Drain – The parcel has mainlines around three sides of the site, and onsite pipelines. There is no sizing for the mainlines so there may be a concern about capacity. Also, the depths of the mainlines appears to be very shallow, or not identified. On-site detention will need to be developed for this site.
 - Natural Gas – It appears that there is natural gas to the east and west of the parcel. Capacity issues are not anticipated at this time.
 - Power and Telecomm – The existing facilities are serviced from overhead lines that feed in from the middle of the south side of the parcel. There is also an underground telephone line at the north edge of the site. It is unlikely that this can be relocated and may impact building layout, and clearances for the proposed site.
- Misc. – other site considerations
 - There is infrastructure for the traffic signals and street lights at the northeast and northwest corners of the site. These probably cannot be relocated.
 - There are several “Monitoring Wells” on the site. These are being used for the mitigation of soil contamination on site due to the service station.
 - In general, the site slopes appear to be relatively flat. Major problems with ADA accessibility are not anticipated. However, a minimum of 2 ADA complaint parking stalls will be needed.

5.1.3 Proposed Utility Systems





PRELIMINARY
NOT FOR CONSTRUCTION

WEBER STATE UNIVERSITY
COMMUNITY OUTREACH PROGRAM CENTER
PRELIMINARY SITE LAYOUT

NV5

6217 SOUTH STATE STREET, SUITE 200
801743.1800 TEL. 801743.0300 FAX

MURRAY, UT 84407
WWW.NV5.COM

PREPARED FOR: WEBER STATE

DATE SUBMITTED: 03/15/2016

SHEET NUMBER

ET01

SCALE

VERTICAL: 1" = 10'

HORIZONTAL: 1" = 10'

JOB NUMBER

SLB0853

NO.	BY	DATE	REVISIONS

The engineer, preparer, these plans, shall not be responsible for or liable for unauthorized changes to or use of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

CAUTION

SECTION 5 BUILDING SUPPORT

5.2 Structural

5.2.1 Structural Description

The Weber State University Community Outreach Center will be a one-story structural steel building. The building size will be approximately 11,000-12,000 square feet. The exterior walls shall consist of aluminum storefront systems and a combination of brick veneer and metal panels backed by light gauge metal studs.

The building site includes an allowance for a future building addition. At this time, this building need not be designed to accommodate the future building addition. When the addition is designed, it is expected to be a standalone structure separated by an appropriately sized expansion joint.

5.2.2 Design Criteria

The structural design shall comply with the 2012 International Building Code (IBC) and all standards referenced therein. Listed below are the minimum required structural design criteria. This building is to be classified as Category II occupancy per the 2012 IBC.

Roof Dead Loads: Dead loads of structural and non-structural elements supported from the building structure.

It shall be anticipated that solar panels will be placed on the roof. The structural design shall appropriately consider the implications of such a system.

Roof Live Loads: 20 psf

Roof Snow Loads:

Snow Ground Load	Pg=43 psf
Snow Importance Factor	I=1.0
Exposure Factor	Ce=1.0
Thermal Factor	Ct=1.0

Include effects of snow drifts where applicable.

Wind Loads:

Equivalent Wind Speed	115 mph
Exposure Type	C

Exposure C shall be used for elements and components including the exterior window/wall systems.

Seismic Loads:

Longitude	41.218 degrees
Latitude	111.960 degrees
Short Period Mapped Acceleration	$S_s = 1.363$
Long Period Mapped Acceleration	$S_1 = 0.507$
Soil Site Class	E
Short Period Site Coefficient	$F_a = 0.9$
Long Period Site Coefficient	$F_v = 2.4$
Spectral Response Acceleration	$SDS = \frac{2}{3} * F_a * S_s = 0.818$
Spectral Response Acceleration	$SD_1 = \frac{2}{3} * F_v * S_1 = 0.811$
Seismic Importance Factor	$I = 1.0$

Response Modification Coefficient:

OCBF $R = 3\frac{1}{4}$ (frame system)

Seismic Response Coefficient:

$C_s = 0.252$ (OCBF)

Dead Loads of Structure	W
Seismic Design Category	D

Geotechnical Study provided by Earthtec Engineering:

Report number	#155044G
date	March 19, 2005
Allowable bearing capacity	1,500 psf on undisturbed native soils 2,000 psf on 18" of compacted structural fill
Frost depth	30 inches

Other minimum codes and standards that apply to the design of this project include current editions of the following:

International Building Code (2012)
ASCE/SEI 7
AISC Code with Commentary
ACI 318 Code
ACI 530.1/ASCE 6/TMS 602
AISI Cold Formed Steel Specifications
ANSI/AWS D1.1 and D1.3 Welding Codes

SJI for Steel Joists and Girders

SDI for Steel Decking

5.2.3 Structural System Description

The vertical elements of the gravity load resisting system shall consist of structural steel HSS columns located in cooperation with the architect. The horizontal elements of the gravity load resisting system shall consist of a combination of structural steel wide flange beams and open-web pre-engineered steel joists.

It is expected that the lateral force resisting system will consist of steel ordinary concentrically braced frames (OCBF). A flexible roof diaphragm will likely consist of 1-1/2" metal B-deck.

Concrete slabs on grade shall be reinforced with synthetic fiber in addition to any mild steel reinforcing(rebar) that may be required for structural purposes. Synthetic fibers shall be a monofilament polypropylene fibers complying with ASTM C 1116, Type III, 1/2 to 1-1/2 inches long. Microfiber is unacceptable.

5.2.4 Foundation Design

A site-specific geotechnical investigation report was not available for review. It is expected that the building will be supported on conventional shallow spread and continuous footings. Based on our experience at other sites in this area, deep foundations are not expected.

5.2.5 Quality Control

Quality control can best be achieved by close coordination and communication between design professionals. All required testing and inspections for structural materials and processes are to be clearly identified in the contract documents. Timely site observations and review of existing conditions should mitigate conflicts before they happen.

Project information

Project name: Weber State University
Community Outreach Center

Project site address: 2605 Monroe boulevard
Ogden, UT

Mechanical Engineer: Bret R. Christiansen
Colvin Engineering Associates
801.505.5411
bchristiansen@cea-ut.com

Project background

General building information:

Square footage: 10,000 gsf

Number of floors: 1 story

Construction Budget: \$3,500,000

Spaces include faculty offices, classrooms, computer lab, kitchen, childcare room and common areas

Code & Standards

The mechanical systems will be designed in accordance with:

2012 IBC

2012 IMC

2012 IPC

2012 IFC

2012 IECC

ANSI/ASHRAE Standard 55-2010

ANSI/ASHRAE Standard 62.1-2010

ASHRAE Standard 52.2-1999

LEED

DFCM Design Standards, current as of completion of Design Development,

Weber State University Design and Construction Standards, October 2009, with section revisions as available

Building Performance

Building energy cost is required to be 20% less than a code-minimum building in accordance with ASHRAE 90.1-2013, in accordance with DFCM HPBS.

Energy performance to be assessed through energy modeling

The only metric to apply to building performance analysis is annual energy cost.

Available Utilities

The building will connect to the city domestic water – 2” for building and 6” for fire protection.

Connect new sanitary sewer to the line available at the site.

Connect new storm sewer to the line available at the site.

Connect new natural gas to the line available at the site.

General Requirements

Site Elevation 4,650 ASL

Outdoor design conditions,
(ASHRAE 99%, winter:..... 12.0 F
Ogden Airport) summer:95.1_{DB}/61.0_{WB} F
dew point:55.4 F

Indoor design conditions:

	Temperature			
	Summer		Winter	
	Occ*	Unocc	Occ*	Unocc
Circulation	75/75	85	72/69	65
Classrooms	75/78	85	72/69	65
Meeting rooms	72/75	85	72/69	65
Private Offices	75/78	85	72/69	65
Restrooms	75/75	85	72/69	65
Storage	80/NA	85	60/NA	55

* setup/setback temperature when space is temporarily unoccupied during occupied period, as determined by space occupancy sensor

Humidity control is not required.

Ventilation/Indoor Air Quality

Comply with the minimum requirements of ASHRAE Standard 62.1-2010, Ventilation for Acceptable Indoor Air.

Reset outdoor air intake flow and/or space or zone airflow as operating conditions change, in accordance with Section 6.2.7 of the Standard, for zones that require Demand Controlled Ventilation (DCV).

Design the ventilation system for an air change effectiveness of 0.8, as determined by ASHRAE Standard 62.1-2010.

Implement a Construction IAQ Construction Management Plan that includes the use of high efficiency filters (Minimum Efficiency Reporting Value (MERV) = 8, as determined by ASHRAE 52.2-1999), at each return for systems used during construction.

Provide MERV 8 filters at the VRF fan coils and MERV 13 filters at the central air handling equipment, without pre-filters.

Exhaust conditioned spaces as follows:

Space	Exhaust Rate Criteria
Toilet Rooms	100 cfm/fixture public, 75 cfm/fixture private
Janitor Closets, Copy Rooms	0.5 cfm/sf, or larger as required to maintain at negative pressure of 0.02” w.c. relative to adjoining spaces
Kitchen	0.7 cfm/sf, or larger as required to maintain at negative pressure of 0.02” w.c. relative to adjoining spaces

Commissioning

Coordinate with the commissioning plan developed, as required by HPBS

The Owner will self-perform commissioning services.

Develop a specification for test and balance that is specific to the project, and is coordinated with the Owner's commissioning plan.

Sustainability/Energy Efficiency

Provide a design narrative that includes the following:

Basis of design, including all information required to prepare the design

LEED checklist of contributions to achieve Silver minimum.

Sequence of operation of all systems, as well as their interaction with other systems.

System description, including operating parameters and assumptions.

A description of the methods used by the design team to achieve sustainability, including the integrated design process; and a description of the results, i.e. a description of the sustainable elements included in the design. Include in this section how the requirements of this program were met.

Results of the energy simulation, with a design energy performance standard for the building.

Specific measures to be investigated include:

Improved supply air fan efficiencies:

System	Baseline	Proposed
Supply Air Fan	1.05 w/cfm	0.75 w/cfm

Improved EER/COP for VRF units

Heat pump water heater, with heat source from electrical room.

Oversized duct for reduced pressure drop.

Low flow plumbing fixtures

Evaporative cooling on exhaust/relief air to provide indirect cooling of outside air.

Measurement and Verification

Energy meters to provide local as well as remote readouts, using BACnet protocol

Continuous metering equipment for the following uses (as applicable):

System	Meter
Domestic Water	Magnetic insertion flow meter similar to Onicon F-3500, providing the following information: fluid flow rate
Natural Gas	Electronic integrated to the campus energy system and the BMS
Electric	Electronic integrated to the campus energy system and the BMS

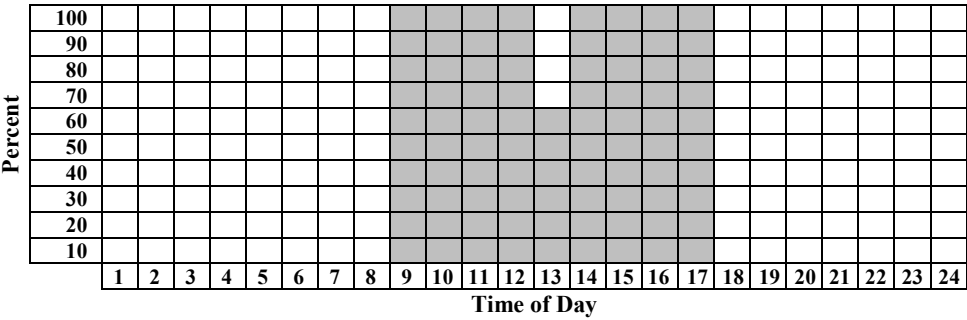
Operations and Maintenance

Periodic HVAC maintenance performed by WSU personnel based at the Ogden Campus.

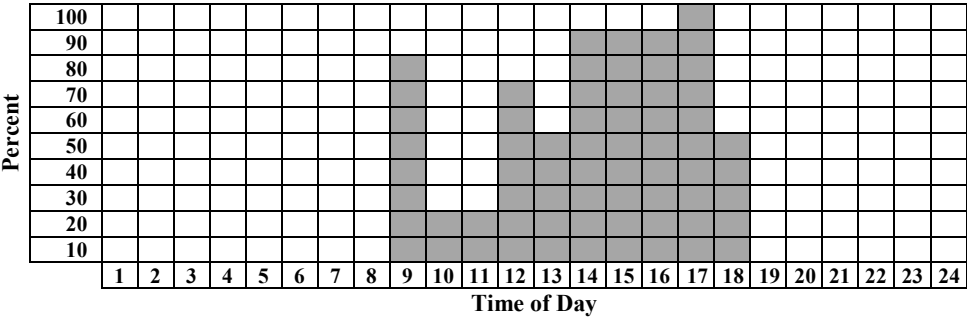
Specify that 40 hours of training is provided, as well as DVD of the entire training demonstrations.

OPERATING SCHEDULES

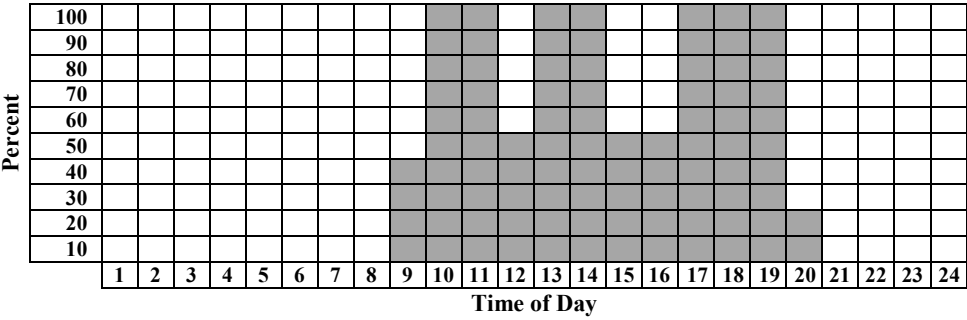
Administrative Area
Design Peak: Reference Room Data Sheets
Year-round weekdays (closed weekends)



Faculty Office
Design Peak: Reference Room Data Sheets
Year-round weekdays (closed weekends)



Classrooms
Design Peak: 25
9 month calendar, weekdays (closed weekends)



Time of Day

Systems:

General Requirements

The preferred method is with a air-cooled Variable Refrigerant Flow (VRF) system.

Specific VRF design expectations include:

- Manufacturer to be Mitsubishi
- Units are to be capable of simultaneous heating and cooling.
- Zone the VRF systems to maximize load sharing, grouping the distribution units and condensing units so that simultaneous heating and cooling occurs on a common circuit as much as possible, in order to maximize energy savings.
- Provide zoning plan during schematic design review that indicates proposed zoning plan for review and approval by Campus Planning staff.
- Locate air cooled condensing units in outdoor mechanical yard on stands. Locate the units so that units can be accessed for maintenance.
- Use ceiling cassette fan coils wherever possible, in lieu of ducted or wall-mount fan coils
- Zone each office independently, as well as each classroom. Controls are to be by the VRF manufacturer. Provide permanently-installed wall-mounted controls.
- Work directly with VRF manufacturer's representative to generate shop drawings as part of the design package, in order to accommodate the specific design strategies of the basis of design system.
- It is critical that the refrigerant lines are routed and installed in a clean and neat manner. Flexible lines are to be rigidly mounted to unistrut and supported without sags.
- Utilize existing standard testing and inspection specification, as well as in-house commissioning standard.
- Communication room cooled on VRF system primary cooling and include electric ventilation fan on emergency power for backup ventilation.
- Performance requirements of the VRF system are as follows:

Air Cooled	EER	IEER	COP
Ducted	11.2	17.6	3.41
Non-ducted	11.3	18.6	3.20

Tested in compliance with AHRI standards

- Kitchen makeup air unit on roof with evaporative cooled and natural gas heating
- Kitchen hood exhaust fan on roof.

Air Side

Provide ventilation air through a dedicated outdoor air system (DOAS).

Single unit, roof-mounted. Route exhaust and ventilation air to roof.

Route exhaust and relief air through the DOAS unit, and incorporate energy recovery into the DOAS unit, either through heat wheel, runaround coil or heat exchanger. Recover energy from relief system, and control relief system to maintain building static pressure.

Require natural gas heating section for backup heating.

Require variable frequency drives on supply and exhaust fan for balancing purposes.

Investigate feasibility of evaporatively cooling the relief/exhaust air in order to provide indirect evaporative cooling for the outside air.

Modulate DOAS fan speed to maintain duct static pressure set point, and reset static pressure set point from control damper position.

Require pressure testing of all duct systems in accordance with 2012 IMC

Deliver ventilation air to each fan coil, and ensure required volume of ventilation air is delivered by the fan coil regardless of fan coil fan speed, wither through the use of a pressure independent control damper or VAV box.

Use automatic dampers on exhaust fans in lieu of barometric dampers.

Document fan sizing calculations with zone by zone load calculations.

Document that transport energy consumption meets the following criteria:

Load	Maximum Air Transport Energy (bhp/1,000 cfm)
Full Load	0.75
50% Load	0.30

Plumbing

Domestic Water Supply

- Connect to new service in adjacent street.
- Install new isolation valve, 2 stage PRV station and reduced pressure principle backflow preventer.
- Install auto-isolation meter at the water service entry, and alarm through BMS and fire alarm
- Distribute throughout with Type L hard drawn copper with wrought copper fittings and lead free solder or mechanical joints
- Do not use PEX piping.

Hot Water

- Generate hot water using heat pump water heaters.
- Generate at 130 F and distribute at the same temperature
- Recirculate to within 3’ of each fixture. Enable recirculation pump with timer, and cycle from aquastat.

Natural Gas

- Connect to new service in adjacent street to serve kitchen equipment.

Primary domestic water valves

- Valves to be stainless steel triple offset butterfly valves.

Sanitary Sewer/Waste/Roof Drains

- Cast-iron pipe and no-hub fittings above grade, PVC below grade
- Minimum size for roof drain piping to be 3”, buried piping to be 4”.
- Kitchen grease interceptor in accessible location for service.

Plumbing Fixtures

- | | |
|---------------|--|
| Water Closet: | Wall-hung, vitreous china, with manual flush valve, 1.28 gpf |
| Urinal: | Wall-hung, vitreous china, with manual flush valve, 0.125 gpf. |
| Lavatory: | Wall-hung or counter-mount, with battery operated automatic sensor faucet, 0.5 gpm.
Provide individual ASEE 1070 listed point-of-use thermostatic mixing valve at each faucet, readily accessible for maintenance |
| Water Cooler: | Wall hung refrigerated water cooler with stainless steel backsplash
Provide multiple locations with bottle fillers |
| Sill Cocks: | Freeze proof at periodic points around bldg exterior. |
| Service Sink: | Floor mounted. |
| General: | Deep seal traps, not trap primers. |

Fire Protection

Provide fire sprinkler protection throughout building. System to comply with NFPA, campus fire marshal building official and IBC requirements and State of Utah Fire Marshal requirements.

Include horizontal routing of fire protection mains on the mechanical drawings. Final head location and pipe less than 2" is not required to be included.

A fire pump is not anticipated, because the flow and pressure requirements can likely be met from the existing system. Conduct a fire flow analysis per DFCM criteria during the schematic design phase to confirm this assumption.

Sprinkler Occupancy Hazard Classifications are as follows:

Office and Public Areas:	Light Hazard.
Service Areas:	Ordinary, Group 1.
Mechanical Equipment Rooms:	Ordinary, Group 1.
Building Service Areas:	Ordinary, Group 1.
Electrical Equipment Rooms:	Ordinary, Group 1.
General Storage Areas:	Ordinary, Group 1.

Minimum Density for Automatic-Sprinkler Piping Design, as follows: (Reduce Design areas with quick response heads when applicable and increase design area as required for pitched ceilings.

Light:	0.10 gpm over 1500 ft ² . area.
Ordinary Group 1:	0.15 gpm over 1500 ft ² . area.

Maximum Protection Area per Sprinkler: As follows (except as modified by authorities having jurisdiction)

Office Space:	225/400 ft ² .
Storage Areas:	130/400 ft ² .
Mechanical Equipment Rooms:	130 ft ² .
Electrical Equipment Rooms:	130 ft ² .
Other Areas:	NFPA 13 recommendations, unless otherwise indicated.

Components and Installation: Capable of producing piping systems with 175-psig minimum working-pressure rating, unless otherwise indicated. All piping and components are to be Schedule 40 steel minimum, and of domestic manufacture.

Controls

Control of the VRF system, including individual zone control and operation of the air-cooled condensing units will be by the VRF manufacturer.

All other systems will be controlled with a Direct Digital Control (DDC) system by Johnson Controls, factory office.

Communicate from VRF to BMS through a BACnet interface, to allow remote monitoring of status and alarms, and adjustment of zone setpoint and schedule.

Integrate the mechanical and electrical systems. Provide microprocessor to microprocessor communication between the DDC and variable frequency drives, air handler(s), electrical distribution, lighting, emergency generators, UPS system and building power.

Additional points shall be made available for non-mechanical/electrical monitoring that may be required by the engineering department.

Provide written sequence of operation on drawings for all systems controlled by the DDC system. Provide graphical representation of sequence of operations on the Building Automation System graphics.

Label the areas served by air handlers and other fan systems on the BAS graphics.

Integrate the building meters with the campus Lucid system

Integrate Johnson BMS with Notifier and LENEL systems.

5.4 Electrical

The proposed site for this project is located on Monroe Street, Ogden Utah.

During our field investigation it was indicated that the medium voltage power distribution system in the vicinity of the project will be capable of handling the electrical load of the new building, requiring a new 12470 volts feeder to be extended from the existing power pole to a new pad mount transformer.

Currently, a bank of three sets of pole mounted transformers on the south west of the property used to feed old buildings, but the capacity of this transformer bank will not be sufficient to support the electrical load of the new building.

Voice and data and TV system will be extended from the same pole to feed the new building.

5.4.1 Power System

1. Primary power distribution system

A new medium voltage pad-mount transformer will be installed on the site by Rocky Mountain Power. New primary conduits will be run from the pole to the pad mount transformer thru a new sectionalizer to be installed near the power pole.

Building Power Density:

Location	Area	Devices	Lighting	HVAC	Misc	Total (KVA)
	SQFT	1.5 Watts	2.5 Watts	6.0 Watts	1.5 Watts	KVA
COC Building	11,800.0	17,700.0	29,500.0	70,000.0	11,800.0	129,000.0

2. Secondary power distribution system

New three-phase, four-wire main distribution panel for 208/120 volts systems will be installed in the new main electrical room to distribute power to branch panel boards, mechanical equipment, outlets, etc.

Electrical rooms will be constructed on the main level of the Building to house the 208/120 V, main distribution panel, branch panel boards, fire alarm panel and power supply. The main electrical room shall be 8'X6'.

In general, the lighting system load, receptacles, mechanical load and miscellaneous load will be supplied through a 120/208 V system.

Branch panel boards with automatic thermal magnetic circuit breakers with minimum 25% extra spare capacity will be installed in the electrical rooms to feed the branch circuits.

20 A duplex receptacles to be installed in the entire facility to comply with the building requirement. Offices to be provided with minimum of four duplex outlets one duplex outlet on each wall.

Ground fault current protected outlets to be installed in all wet locations as required by National and International electrical codes.

Special outlets to be installed for Owner's equipment with specific power requirements.

Digital Power metering will be provided for the new 208/120 V switchboards.

Surge Protected Devices will be installed for main distribution switchboards.

New designated panel will be installed to provide power to new mechanical equipment. All three phase motor controllers will be equipped with circuit breaker type protection and phase loss protection.

Minimum ¾" conduit for all electrical circuits and 1" conduit for voice/data systems is to be used. Use of aluminum conduit and MC cable are prohibited in this project.

3. Emergency power distribution system

TESLA battery system will be considered versus a diesel engine generator to provide emergency power to the life safety system, communication room, fire alarm system and access systems.

4. Grounding System

New grounding system riser will be installed in the building.

Common copper grounding bus bars will be installed in the following locations:

Main electrical rooms.

DEMARC/MDF/IDF room.

5.4.2 Lighting System

1. Luminaires

Standard LED light fixtures will be installed throughout the entire building to meet illumination requirements within the spaces and to provide uniform lighting levels throughout the spaces.

The exact type of the fixtures will be coordinated with the Owner and Architect for all areas of the building. Appropriate type fixtures and controls suitable for specific areas will be selected.

The LED light fixtures will consist of, but not limited to, 2'X2', 2'X4', down light fixtures, pendant direct and indirect and LED Edge Lite exit signs will be installed in the entire building.

Hallway emergency lights and conference rooms' emergency lights to be provide with Bodine emergency relays.

Special consideration will be given to the lighting layout and selection for the following areas:

- Conference rooms
- Offices
- Community gathering area
- Child care area
- Building exterior lighting for additional security

2. Lamps

All light fixtures will be specified with LED lamps.

LED light fixtures will be specified with 5000 K color temperature, minimum 60,000 hours average life.

3. Drivers

Electronic drivers with minimum of 5 years warranty will be specified.

4. Light Level

SPACES	AVG. FOOT CANDELS
○ Offices	50-75
○ Storage area	20-50
○ Mechanical area	10-25
○ Hallways	15-25
○ Community Gathering	30-50
○ Restrooms	15-25
○ Childcare area	40-50
○ Parking area & roadway	1-2

5. Lighting control system

Daylight harvesting to be considered for specific areas of the building.

Ceiling mounted occupancy sensor light switches will be installed in the entire building to turn off the lights when they are not occupied to save energy.

Dual light level switches or wall mounted occupancy sensor light switches will be installed in the offices, storage spaces, etc. to turn off the lights when they are not occupied to save energy.

Astronomic time clock will be installed to control outdoor light fixtures.

Light intensity control for specific areas will be accomplished by dimming system and/or multilevel light switching.

5.4.3 Telecommunication System

1. Communication rooms

A DEMARC/BDF/IDF room (10'X12') shall be constructed on the main level, the room shall be located to accommodate building future expansion.

Recommended cat 6A cable total length between the IDF and the outlet will not exceed 295 feet.

Communication room will be provided with emergency power and normal power.

An individual grounding system will be installed in every room and will be tied into the building main grounding system.

2. Raceway for service entrance

Two (2) 4" conduits will be extended from the existing pole to the new DEMARC/BDF/IDF thru a flash mounted Carsonite pull-box outside the building.

A 2" conduit shall be run from the new com room to the roof for future signal improvement inside the building.

3. Raceway for horizontal network system

Cable trays will be installed in all corridors and in accessible ceiling spaces.

One 1" conduit will be extended from each voice/data outlets to the cable tray or to communication room as required.

5" square 2 1/8" deep junction boxes to be installed for communication outlets.

Conference rooms and Community Gathering rooms will require 2" conduits to overhead projector and to the media controller in the conference tables or media cabinet as applicable. Terminate conduits to a 12"X12", 4" deep j-boxes in the wall and under the conference table.

4. Generally a minimum of one communication duplex outlet is required in each occupiable room in this project. Larger rooms, may require more than one outlet.

5. Provision will be made for wireless access points in the entire building, specifically in all classrooms and outside the building to provide wireless coverage in the new pavilion area.

5.4.4 Fire Alarm System

1. Fire alarm control panels

A new Notifier addressable fire alarm control panel will be installed in the building.

2. Detection system

Detection will be accomplished by the installation of photoelectric smoke detectors, beam smoke detectors, manual pull stations and duct detectors.

Additional auxiliary deduction systems such as flood probes in the lower areas and other specific areas are to be installed and tied to the fire alarm system through addressable modules.

3. Annunciation system

Annunciation will be made throughout the building by horn/strobe lights to be installed throughout the entire building.

Remote fire alarm annunciation panels are to be installed at the main entrance.

4. Reporting and monitoring system.

The Fire Alarm System will be networked to WSU Campus Fire Alarm Network System.

5.4.5 Security System

1. Access control system

Per WSU requirement only j-boxes and conduits will be installed at the main entrances of the building.

2. IP Video monitoring system

Per WSU requirement only j-boxes and conduits will be installed for monitoring outside the building and main entrances of the building.

3. Intrusion detection system

All exterior parameter doors will be provided with door positioning switches to be monitored by the security panel.

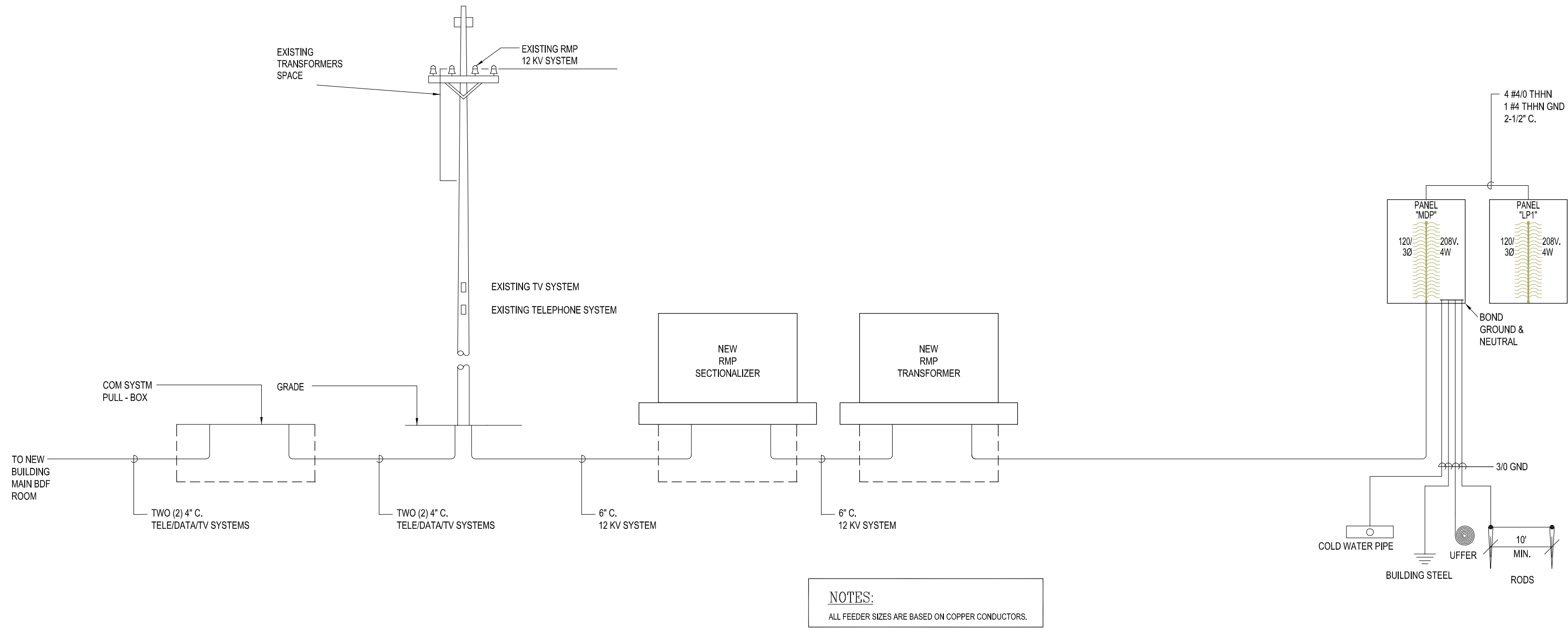
5. Reporting and monitoring system

The new systems will be tied to the Campus Monitoring Network System.

5.4.6 Other Systems

1. Clocks

Wireless, battery operated, self-corrected via GPS, clock system will be installed.



POWER/UTILITY SYSTEMS SINGLE LINE DIAGRAM
SCALE: N.T.S.

5.5 Vending / Acoustical

5.5.1 Vending

The program for the Community Outreach Center includes a small vending area for multiple machines. In addition to power for all machines, data ports should be provided at each machine for monitoring, troubleshooting and re-filling. Hard surfaces as well as floor drains should be provided under all vending machine areas to assist in cleaning up accidental spills.

5.5.2 Acoustics

In order to validate and achieve the goals outlined in this section, an acoustical engineer should be included as part of the project team. The engineer may be hired either by the owner or the design team, as negotiated.

As a hub of student activity the Community Outreach Center must successfully balance the need for the social and interactive aspects of the student experience with the quiet, contemplative needs of staff work and academic instruction. In order to accommodate numerous types of public and private space with differing acoustical needs in a single building, the new building must take into account the appropriate sound absorption, acoustical separation, and background noise control measures needed to maintain quiet study spaces while allowing comfortable group study and gathering to occur in the entry and other designated areas of the building.

In order to ensure that the acoustics in each space are optimal for their use, and to ensure the acoustical separation of differing spaces within the building, designers must consider three essential components of sound transmission: the source of sounds, the path of sound waves, and the perception of the receiver. The perception of the receiver can be influenced, and unwanted noise eliminated, by carefully planning the source and path of sound waves. This planning involves a delicate balance of space considerations, background noise, acoustical absorption and acoustical isolation.

Acoustical separation can be accomplished to a great extent through effective space planning. Mediate differing acoustical conditions can be accomplished by zoning the COC spaces to create natural buffer zones between very active and very quiet spaces. Because plans for the design of the COC include a move toward more interactive spaces, and because academic instruction rooms are interspersed throughout the building, each subdivision of space must also be considered individually.

The amount of background noise in a space can have significant impact on the comfort level of its users; too much background noise can be distracting, while too little will only accentuate the noises of conversation, computer keys clicking, and other sounds created through general use. Recommended *Noise Criteria (NC)* for collegiate spaces are as follows:

Space Type	NC Rating
Open Public Areas (Circulation, Lobbies)	35-40
Computer Work Areas	40
Private Offices	30-35
Open Staff Work Areas	35-40
Copy Rooms	40
Teleconference Rooms	max 25
Quiet Study Rooms	25-30
Classrooms, Training Rooms	25-30
Assistive Devices Lab	30-35

Designers may need to consider both sound absorption and sound isolation in the design process to achieve their NC targets. Interior finish materials are the principal contributors to sound absorption. Typically, suspended acoustical ceiling tiles are programmed to prevent sound reflection off the ceiling. The sound absorption properties of typical finish materials, expressed in terms of *Noise Reduction Coefficient* (NRC), are listed in the following table:

Sound Absorption (Common Building/ Furnishing Materials) and NRC

Walls	
Unglazed Brick	0.00
Gypsum Board, ½ inch	0.05
Coarse concrete block	0.35
Shredded wood fiberboard (2 inches on concrete)	0.75
Floors	
Wood	0.10
Carpet on concrete (no underlay)	0.30
Carpet on foam rubber	0.55
Ceilings	
Plaster on lath	0.05
Suspended acoustical tile, ¾ inch thick	0.95

While sound absorption helps control the noise level within a space, sound isolation helps control the transmission of sound from one space to another. As with sound absorption, STC-rated walls should be used to reduce sound transmission into some spaces and out of others. We recommend STC-rated partitions surrounding or separating programmed spaces in accordance with the following table:

Space Type	STC
Open Public Areas	40-45
Computer Work Areas	40-45
Private Offices	45-50
Open Staff Work Areas	45-50
Copy Rooms	50-55
Teleconference Rooms	45-50

Quiet Study Rooms	45-50
Instruction Rooms, Training Rooms	40-45
Lab for Assistive Devices	40-45
Mechanical Rooms	55-65
Elevator Rooms	55-65
Restrooms	55-65

Impact noise or structure-borne vibration can contribute to poor acoustics as much as airborne sound. Such concerns within the COC project include the sounds of footstep on hard surfaces and vibrations created by mechanical equipment. Impact and vibration are expressed in terms of *Impact Isolation Class (IIC)*. We recommend using floor/ceiling assemblies above and/or below the listed spaces having the following IIC ratings:

Space Type	IIC
Open Public Areas (Circulation, Reference)	50
Computer Work Areas	50
Private Offices	50
Open Staff Work Areas	50
Copy Rooms	55
Teleconference Rooms	50
Quiet Study Rooms	50
Instruction Rooms, Training Rooms	50
Lab for Assistive Devices	55
Mechanical Rooms/Penthouse	65*
Elevator Rooms	65*
Restrooms	55

* If this IIC cannot be achieved, design to minimum IIC of 55 and isolate all vibration producing equipment.

Even taking the greatest care in space planning, certain areas within the COC project facility will be more acoustically problematic, particularly if they are areas that require acoustical separation, but are located adjacent to noisy areas. Careful attention to the materials used to finish and furnish each room, acoustical seals and sweeps separating the spaces, and airborne noise from mechanical equipment must be planned for and mitigated.

SECTION 6

TOTAL PROJECT ESTIMATE OF COST

6.1 Total Project Cost Summary

At the time of printing of this DRAFT program, the cost model is based the cost per square foot and the extent of remodeling, as determined by Parametrix, Inc., a professional cost estimator. These parameters are applied to the space summary to arrive at the cost estimate.

The conceptual design and project cost will reasonably reflect the level of quality sought by the stakeholders of the Community Outreach Centre project. It is difficult to predict inflation in the coming year, so an escalation rate of 6% per annum was used, based on an estimated bid date of spring 2017.

Programming efforts paralleled the cost estimate. The following pages present the project cost model as a budget overview, including both construction costs and project soft costs.

6.1.2 Cost Model

SUMMARY OF SPACES		11,785 gsf		\$ 250 ave./gsf		\$ 2,946,154
1	ADMINISTRATION	2,475	3,808	32%	\$ 250	\$ 951,923
2	ACADEMIC INSTRUCTION	4,125	6,346	54%	\$ 250	\$ 1,586,538
3	CHILD & FAMILY STUDIES	1,060	1,631	14%	\$ 250	\$ 407,692
Utilities Connection		400	lf	\$ 150 /sf		\$ 60,000
Site Development		20,000	Sf.	\$ 30 /sf		\$ 600,000
summary of construction costs		11,785	gsf			\$ 3,606,154
overhead / profit					4%	\$ 144,246
general conditions					5%	\$ 180,308
design contingency					15%	\$ 540,923
construction budget				\$ 379		\$ 4,471,631
furniture, fixtures & equipment (ff&e)				\$ 30.00 /sf		\$ 353,538
plan review & building permitting					1%	\$ 44,716
commissioning (estimated cost only, actual cost held by WSU)					0.5%	\$ 22,358
energy modeling (estimated cost only, actual cost held by WSU)					0.1%	\$ 4,472
administrative costs/ fees (estimated cost only, actual cost held by WSU)					13%	\$ 581,312
escalation					4%	\$ 178,865
WSU Community Outreach Center building project soft costs (estimated only, actual costs held by WSU)						\$ 1,185,262
WSU Community Outreach Center total project costs						\$ 5,656,893

**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

S U M M A R Y

Program Construction Cost Estimate
March 9, 2016

SECTION			COST/SF	COST
1 ADMINISTRATION:	3,808	GSF	239.00	\$911,000
2 ACADEMIC INSTRUCTION:	6,346	GSF	240.00	\$1,515,000
3 CHILD & FAMILY STUDIES:	1,631	GSF	231.00	\$376,000
4 BUILDING SERVICES:	1,180	GSF	222.00	\$262,000
5 SITE IMPROVEMENTS:	65,000	SF	13.00	\$871,000
<hr/>				
SUB-TOTAL (Building & Site)	12,965	GSF	304.00	\$3,935,000
DESIGN CONTINGENCY, ALLOW	10.0%		30.00	\$394,000
INFLATION TO SPRING 2017, ALLOW	6.0%		18.00	\$236,000
TOTAL (Construction)	12,965	GSF	352.00	\$4,565,000

NOTES: Costs are for Construction Only.
 Costs are Based on a Traditional Open Competitive Bid Basis.
 Costs Include Contractor Mark-Ups.
 Costs are Based on a Construction Start of Spring 2017.



**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

Program Construction Cost Estimate
March 9, 2016

SECTION	UNIT	UNIT COST	COST
1 ADMINISTRATION:			
1.1 Entry			
Lobby / Reception	492 GSF	290.00	\$143,000
Lounge	185 GSF	265.00	\$49,000
	677 GSF	284.00	\$192,000
1.2 Offices			
CELR Office	185 GSF	250.00	\$46,000
CELR Office Shared	923 GSF	225.00	\$208,000
COF Office	185 GSF	250.00	\$46,000
COF Office Shared	977 GSF	225.00	\$220,000
COF Counseling	246 GSF	225.00	\$55,000
	2,516 GSF	229.00	\$575,000
1.3 Support			
Conference Room	492 GSF	235.00	\$116,000
Copy / Mail / Work Area	123 GSF	225.00	\$28,000
	615 GSF	234.00	\$144,000
Sub-Total Administration	3,808 GSF	239.00	\$911,000



**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

Program Construction Cost Estimate
March 9, 2016

SECTION	UNIT	UNIT COST	COST
2 ACADEMIC INSTRUCTION:			
2.1 Classrooms			
Computer Lab	1,385 GSF	250.00	\$346,000
Community Gathering Room	4,338 GSF	235.00	\$1,019,000
	5,723 GSF	239.00	\$1,365,000
2.2 Support			
Kitchen	346 GSF	275.00	\$95,000
Chair & Table Storage	277 GSF	200.00	\$55,000
	623 GSF	241.00	\$150,000
Sub-Total Academic Instruction	6,346 GSF	240.00	\$1,515,000



**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

Program Construction Cost Estimate
March 9, 2016

SECTION	UNIT	UNIT COST	COST
3 CHILD & FAMILY STUDIES:			
3.1 Children School			
Office	185 GSF	265.00	\$49,000
Classroom Restrooms	92 GSF	325.00	\$30,000
Childcare Room	1,077 GSF	225.00	\$242,000
Storage, Prep & Observation	277 GSF	200.00	\$55,000
Outdoor Play Yard			Included In Site
	1,631 GSF	231.00	\$376,000
Sub-Total Child & Family Studies	1,631 GSF	231.00	\$376,000
4 BUILDING SERVICES:			
4.1 Support			
Restrooms	300 GSF	325.00	\$98,000
Janitorial / Custodial	160 GSF	215.00	\$34,000
Mechanical / Electrical	400 GSF	180.00	\$72,000
Telecommunications	120 GSF	180.00	\$22,000
Building Storage	200 GSF	180.00	\$36,000
	1,180 GSF	222.00	\$262,000
Sub-Total Building Services	1,180 GSF	222.00	\$262,000



**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

Program Construction Cost Estimate
March 9, 2016

SECTION		UNIT	UNIT COST	COST
5 SITE IMPROVEMENTS:				
5.1 Site Improvements				
Site Demolition & Preparation	65,000	SF	2.50	\$163,000
Outdoor Mechanical Yard (Match Building Material)	600	SF	60.00	\$36,000
Outdoor Electrical Yard	400	SF	50.00	\$20,000
Outdoor Dumpster Enclosure	400	SF	50.00	\$20,000
Outdoor Fenced Playground	1,750	SF	70.00	\$123,000
Site Improvements, Paving & Landscaping	28,650	SF	12.00	\$344,000
Site Improvements, Minimal Landscaping (Future)	20,200	SF	1.50	\$30,000
Site Utilities	1	LS	100,000	\$100,000
Site Lighting	1	LS	35,000	\$35,000
	65,000	SF	13.00	\$871,000
Sub-Total Site Improvements	65,000	SF	13.00	\$871,000
SUB-TOTAL (Building & Site)	12,965	GSF	304.00	\$3,935,000
DESIGN CONTINGENCY, ALLOW	10.0%		30.00	\$394,000
INFLATION TO SPRING 2017, ALLOW	6.0%		18.00	\$236,000
TOTAL (Construction)	12,965	GSF	352.00	\$4,565,000

NOTES: Costs are for Construction Only.
 Costs are Based on a Traditional Open Competitive Bid Basis.
 Costs Include Contractor Mark-Ups.
 Costs are Based on a Construction Start of Spring 2017.



**WEBER STATE UNIVERSITY
COMMUNITY OUTREACH CENTER**

Program Construction Cost Estimate
March 9, 2016

<u>SECTION</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>COST</u>
COST OPTION:			
West Side Gathering Plaza	5,600 SF	\$50.00	\$280,000

NOTES: Costs are for Construction Only.
Costs are Based on a Traditional Open Competitive Bid Basis.
Costs Include Contractor Mark-Ups.
Costs are Based on a Construction Start of Spring 2017.



6.2 Furniture, Fixtures & Equipment (FF&E) Cost Summary

Rm No.	Room Name	Price
1.1.1	Lobby / Reception	\$ 19,056
	Midwest	\$ 8,532
	(2) 46" Monitors	\$ 10,000
	(2) Networked Workstations	\$ 500
	Sm Trash/Recycling	\$ 24
1.1.2	Lounge	\$ 12,517
	Midwest	\$ 7,481
	46" Monitor	\$ 5,000
	Lg Trash/Recycling	\$ 36
1.2.1	CCEL Office	\$ 5,261
	Midwest	\$ 4,849
	Networked Workstation	\$ 250
	Trash/recycling	\$ 12
	Coat Rack	\$ 150
1.2.2	CCEL Shared Office	\$ 36,078
	Midwest for 3 lg workstations	\$ 11,412
	Midwest for 8 sm workstations	\$ 21,784
	(11) Networked Workstations	\$ 2,750
	Trash/recycling (11 sets)	\$ 132
1.2.3	CEC Office	\$ 5,261
	Midwest	\$ 4,849
	Networked Workstation	\$ 250
	Trash/recycling	\$ 12
	Coat Rack	\$ 150
1.2.4	CEC Shared Office	\$ 39,884
	Midwest for 7 lg workstations	\$ 25,875
	Midwest for 4 sm workstations	\$ 11,127
	(11) Networked Workstations	\$ 2,750
	Trash/recycling (11 sets)	\$ 132
1.2.5	CEC Counseling	\$ 6,458
	Midwest	\$ 4,796
	36" Networked Monitor / workstation	\$ 1,500
	Trash/recycling	\$ 12
	Coat Rack	\$ 150
1.3.1	Conference Room	\$ 21,679
	Midwest	\$ 11,679
	AV - projector and controls to wall	\$ 5,000
	46" monitor	\$ 5,000
1.3.2	Copy/Mail/Work Area	\$ 36
	Printer/Copier (by owner)	
	Trash / recycling bins	\$ 36
2.1.1	Computer Lab	\$ 79,628
	(20) Computer Worktables	\$ 30,000

	Midwest	\$	14,592
	Distance Ed Room setup	\$	25,000
	Projector		
	(40) Networked Workstations	\$	10,000
	Trach / recycling bins	\$	36
2.1.2	Community Gathering Room	\$	129,513
	Midwest	\$	101,655
	(3) Distance Ed Rm Setups	\$	25,000
	(3) Controlers for Projection/Lights/Partition	\$	2,000
	(3) Networked Projectors	\$	750
	Trash / recycling bins	\$	108
2.2.2	Kitchen	\$	5,836
	(2) Refrigerator	\$	2,200
	Oven	\$	2,000
	(2) Cooktop	\$	1,200
	(2) Microwave	\$	400
	Trash / recycling	\$	36
3.1.1.	Childcare Office	\$	5,212
	Midwest	\$	4,800
	Networked Workstation	\$	250
	Trash / recycling	\$	12
	Coat Rack	\$	150
3.1.3	Childcare Room	\$	28,586
	Budget for classroom furniture	\$	25,000
	Projector	\$	3,000
	Coat Rack	\$	150
	(1) Networked Workstation	\$	250
	Trash / recycling	\$	36
	Coat Rack	\$	150
3.1.4	Storage, Prep and Observation	\$	4,262
	Midwest	\$	3,350
	(3) Networked Workstations	\$	750
	Trash / recycling	\$	12
	Coat Rack	\$	150
3.1.5	Childcare Support	\$	3,086
	Microwave	\$	200
	Refrigerator	\$	1,100
	Networked Workstation w/ Wall Mount Monito	\$	1,750
	Trash / recycling	\$	36
Total		\$	402,353

SECTION 7

Appendices

7.1 Initial LEED Credit Goals

7.2 Early Concept Planning



Sustainable Sites


	Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes
C <u>pre req. 1</u> Construction Activity Pollution Prevention (0 points possible) Have a plan appropriate to the site based on the 2003 EPA Construction General Permit.	req'd	90%	Civil/Contractor	Civil to create plan for contractor to follow in accordance with EPA Construction General Permit.
d <u>credit 1</u> Site Selection (1 point possible) Do not build on prime farmland, floodplain, threatened species' habitat, near wetlands or on public parklands	1	100%	CRSA	
d <u>credit 2</u> Development Density & Community Connectivity (1 point possible) Channel development to urban areas with existing infrastructures, protecting greenfields and preserving habitat and natural resources. option a: An existing development density of 60,000 SF/acre (2 story downtown development). option b: on a site within 1/2 mile of a residential zone w/ 10 units per acre and w/in 1/2 mile of 10 basic services	0	0%	CRSA	On established Campus land
d <u>credit 3</u> Brownfield Redevelopment (1 point possible) Rehabilitate damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land. <i>Can get possible EPA listing for asbestos.</i>	1	90%	CRSA	Redevelopment guidelines need thorough review.
d <u>credit 4</u> Alternative Transportation (1-4 points possible) 4.1. Public transportation access (existing; OR planned & funded). light rail within a 1/2 mile; 2 bus lines within 1/4 mile	1	90%	CRSA	Multiple bus lines within 1/4 mile
d 4.2. Bicycle Storage & Changing Rooms This requires secure bike spaces and/or storage for 5% of peak building users. AND shower and changing facilities for 0.5% of FTE	1	80%	CRSA	Will require minimum of 1 male/1 female shower. New bike racks must be provided in the number required.
d 4.3. Low-emitting & fuel efficient vehicles option a: Provide low-emitting and fuel efficient vehicles for 3% of FTE and provide preferred parking for these vehicles option b: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total parking capacity option c: Install alternative-fuel refueling stations for 3% of total vehicle parking capacity	1	80%	CRSA	Provide ___ stalls as preferred parking spaces reserved for fuel-efficient vehicles.
d 4.4. Parking Capacity option a (non-residential): don't exceed min. zoning reqmts; AND preferred parking for 5% of total parking spaces option b (non-residential): if parking provided for <5% FTE occupants, preferred parking for 5% of total parking spaces option c (residential): don't exceed min. zoning reqmts; AND provide infrastructure/programs for ridesharing option d (all): no new parking	1	80%	CRSA	Verify the use of electric charging stations with the University Since zoning requirements are not mandated to be met, meet requirements of Portland Parking Title 33. For our 10,000 sf building, requires a minimum of ___, and a maximum of ___ stalls. ZONING REQUIREMENT: 1 stall per every 500 sf. At 10,000 sf = 20 stalls. Above 10,000 sf there is a different calculation.
C <u>credit 5</u> Site Development (1-2 points possible) 5.1 Protect or Restore Habitat option a (greenfields): limit site disturbance to 40' beyond the building perimeter, 10' beyond hardscape & minor utilities, 15' beyond primary roadway curbs & main utility branch trenches, & 25' beyond constructed areas with permeable surfaces.	0	0%	Landscaping	Site is not a greenfield.
C option b (prev.developed sites): Restore 50% of open space by planting native or adapted vegetation. (<i>including green roofs, if applicable</i>)	1	80%	Landscaping	Review with landscaping team
d 5.2 Maximize Open Space option a: reduce development footprint to exceed local zoning open space req'mt for site by 25% option b: if there is no zoning reqmt, provide vegetated open space area equal to the building footprint. option c: where zoning has no open space requirement, provide vegetated open space equal to 20% of the project's site area.	1	90%	Landscaping	Open space to be designated not to be built upon in the future.
d <u>credit 6</u> Storm Water Design (1-2 points possible) 6.1 Quantity Control (if existing imperviousness is less than or equal to 50%): option a: stormwater management plan that prevents the post-development peak discharge rate & quantity from exceeding the pre-development peak discharge rate & quantity (for one and two-year 24hr design storms) option b: stormwater management plan that protects receiving stream channels from excessive erosion by implementing stream channel protection strategy & quality control measures	1	90%	Civil	Verify existing perviousness. Site plantings and soils will encourage percolation within the project site. Site to follow LEED-NC Application Guide for Multiple Buildings and On-Campus Building Projects in utilizing the campus stormwater system to contain stormwater on campus.
d 6.1 Quantity Control (if existing imperviousness is greater than 50%): option c: stormwater management plan that decreases volume of two-year 24hr design storm by 25%.	0	0%	Civil	
d 6.2 Quality Control Implement a stormwater management plan that reduces impervious cover, promotes infiltration & captures & treats runoff from 90% of the average annual rainfall using BMPs. (remove 80% of TSS loads)	1	90%	Civil	Achievable with snouts, gravel sumps etc.in conjunction with keeping all stormwater on campus.
C <u>credit 7</u> Heat Island Effect (1-2 points possible) 7.1 Non-Roof. option a: 50% of non-roof impervious surfaces shall be shaded, open-grid or light-colored paving (SRI ≥29). option b: 50% of parking shall be underground, under deck, under roof, or under a building. Any roof to cover parking must have SRI ≥29.	0	0%	Civil	Requires at least 50% of paving to be concrete or other light-colored paving. Sidewalks to be concrete, parking to be asphalt.


<p>d 7.2 Roof option a: 75% of roof surface must meet the following SRI requirements: low-sloped roof (slope ≤2:12), SRI ≥78 steep-sloped roof (slope >2:12), SRI ≥29 option b: 50% of roof shall be vegetated option c: combine the above two options to meet the following formula for area: $(SRI\ area/0.75) + (vegetated\ area/0.5) \geq total\ roof\ area$</p>	<p>1</p>	<p>90%</p>	<p>CRSA</p>	<p>White membrane roofing meet SRI requirements</p>
<p>d credit 8 Light Pollution Reduction (1 point possible) Interior Lighting. option a: angle of maximum candela from each interior luminaire shall not exit through the windows. option b: all non-emergency interior lighting shall turn off during non-business hours, with manual override. Exterior Lighting. Classify project site into RP-33 zones to determine requirements. LZ1. Dark (Park and Rural Settings) LZ2. Low (Residential areas) LZ3. Medium (Commercial/Industrial, High-density Residential) LZ4. High (Major City Centers, Entertainment Districts) Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades & landscape features as defined in ASHRAE/IESNA Standard 90.1-2004.</p>	<p>1</p>	<p>50%</p>	<p>Electrical</p>	<p>Interior and site lighting are planned to avoid light pollution with shielded/full cutoff light fixtures, no uplighting.</p>

Water Efficiency				
	Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes
d credit 1 Water Efficient Landscaping				
1.1. Reduce by 50% Reduce potable water consumption for irrigation by 50% from a calculated mid-summer baseline case using plant species, irrigation technology, captured/recycled water, publicly supplied non-potable water.	1	80%	Landscaping	Use of water efficient landscaping and irrigation- drip system in planting beds.
1.2. No Potable Water Use or No Irrigation 100% total reduction in potable water for irrigation, or no permanent irrigation systems	0	0%		
d credit 2 Innovative Wastewater Technologies (1 point possible) option a: Reduce potable water use for sewage conveyance by 50% with water-conserving fixtures or non-potable water. option b: Treat 50% of wastewater on-site to tertiary standards to remain on-site.	0	0%	Civil	
d credit 3 Water Use Reduction (1-2 points possible) Reduce water usability by (3.1) 20% and (3.2) 30% over EPA 1992 requirements (which includes low-flow water closets)	1 0	80% 0%	Mechanical	Use of low flow fixtures; showerhead, faucets, urinals etc. Assumes 1.1/1.6 gpf toilets, 1/8 gpf urinals, .5 gpm faucets, 1.5 gpm showerheads.


Energy & Atmosphere					
	Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes	
C <u>prereq 1</u> Fundamental Building Systems Commissioning	req'd	90%	DFCM with CxA direct hire	Required on all DFCM projects. Commissioning specs provided, team to coordinate with cx agent for design reviews, submittal reviews, testing, training etc. Cx Agent to review prior to 50% CD.	
Commissioning Authority (CxA) shall have documented commissioning authority experience in at least two building projects. CxA shall report findings and recommendations directly to the Owner. <i>If project <50,000sf, CxA may include qualified persons on the design/construction teams who have the required experience.</i>					
d <u>prereq 2</u> Minimum Energy Performance	req'd	90%	DFCM with Energy Modeler direct hire	General good practice anticipated with a well designed system.	
Comply with both mandatory AND prescriptive requirements of performance ASHRAE/IESNA 90.1-2004 (without amendments). (Sections 5.4, 6.4, 7.4, 8.4, 9.4, 10.4 AND 5.5, 6.5, 7.5, 9.5) <i>(allows use of performance requirements in section 11 in lieu of prescriptive)</i>					
d <u>prereq 3</u> Fundamental Refrigerant Management	req'd	90%	Mechanical	General good practice anticipated with a well designed system.	
Zero use of CFC refrigerants in new buildings & CFC phase-out conversion in existing.					
d <u>credit 1</u> Optimize Energy Performance (1-10 points possible)	4	80%	DFCM with Energy Modeler direct hire	Computer modeling to provide savings performance percentages. Assume: Demand controlled ventilation, Solarban 70XL glazing, use of high performance systems, perimeter heating in offices, heat exchanger on exhaust ventilation system if applicable with VRF system planned, etc.	
option a: Whole Building Energy Simulation Use the Building Performance Rating Method in Appendix G of 90.1-2004. New Buildings, 10.5% - 42% reduction. (1 point per 3.5% increment up to 10) <i>Existing Buildings 3.5% - 35% reduction. (1 point per 3.5% increment up to 10)</i> option b: Prescriptive Compliance Path (4 points) For office occupancy buildings <20,000sf: comply with ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004. option c: Prescriptive Compliance Path (1 point) Comply with Basic Criteria & Prescriptive Measures of the Advanced Buildings Benchmark™ Version 1.1 (not incl 1.7, 1.11, 1.14)					
d <u>credit 2</u> On-Site Renewable Energy (1-3 points)	0	10%	Electrical	May want to plan for a future PV array.	
Encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use (2.5-7.5-12.5% contribution)					

C	credit 3 Enhanced Commissioning (1 point possible) CxA for this credit may not be an employee or contracted through contractor.	1	80%	DFCM with CxA direct hire	Commissioning specs provided, team to coordinate with cx agent for design reviews, submittal reviews, testing, training etc.
d	credit 4 Enhanced Refrigerant Management (1 point possible) option a: do not use refrigerants option b: calculate a building weighted average for Ozone Depletion Potential and Global Warming Potential where LCGWP + LCODP x 10 ⁵ ≤ 100 AND use fire suppression systems that do not contain CFCs, HCFCs or Halons	1	80%	Mechanical	Anticipated with refrigerant selection.
C	credit 5 Measurement and Verification (1 point possible) Provide for the ongoing accountability of building energy consumption over time. Implement a M&V plan to cover at least one year post-construction. IPMVP	0	10%	Mechanical	Likely too extensive and not appropriate for this project. Review WSU needs.
C	credit 6 Green Power (1 point possible) Encourage the development and use of grid-source energy technologies on a net zero pollution basis, 35% of the building's "regulated" electricity for two years. Use EA 1.0 model OR DOE Commercial Building Energy Consumption Survey (CBECs) database to determine estimated use. Meet the Center for Resource Solutions certification requirements.	0	80%	Contractor/Owner	Available from a variety of providers. ID credit possible for 70% green power.

 <h1>Materials & Resources</h1>					
		Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes
d	prereq 1 Storage & Collection of Recyclables Facilitate the reduction of non-hazardous waste generated by building occupants that is hauled to and disposed of in landfills by providing recycling areas.	req'd	90%	CRSA	Provide recycling for glass, cardboard, paper, metal and plastic. If recycling for all of these materials is not available, campus to create a policy to adopt services as they become available.
C	credit 1 Building Reuse (1-3 points possible) If the project includes an addition to an existing building, the square footage of the addition may not be more than 2 times the square footage of the existing building to achieve this point. 1.1. Retain 75% of existing shell: walls, floors & roof (by surface area) 1.2. Retain 95% of existing shell: walls, floors & roof (by surface area) 1.3. Retain 50% of interior nonstructural elements (% of total building area including additions)	0 0 0	0% 0% 0%	Contractor	Not applicable.
C	credit 2 Construction Waste Management (1-2 points possible) Salvage/Recycle 50% min (2.1) -75% min (2.2) of nonhazardous construction waste. Soil & land clearing do not contribute to this credit.	1 0	50% 0%	Contractor	Verify availability in Logan
C	credit 3 Materials Reuse (1-2 points possible) Specify 5-10% cost of division 02-10 building materials. Specify salvaged or refurbished materials for 5% (3.1) or 10% (3.2) of building materials.	0	10%	Contractor	Not anticipating a large use of salvaged materials.
C	credit 4 Recycled Content (1-2 points possible) Specify 10-20% cost of division 02-10 building materials. Specify a minimum of 10% (post-consumer + 1/2 pre-consumer) (4.1) or 20% (post-consumer + 1/2 pre-consumer) (4.2).	1 1	80% 60%	Contractor	To include drywall, carpeting, insulation, concrete, steel etc. To include in specs and select products with high recycled content.
C	credit 5 Regional Materials (1-2 points possible) 10% (5.1) or 20% (5.2) cost of division 02-10 building materials shall be extracted, processed & manufactured within a 500mi radius.	1 0	80% 30%	Contractor	This is more difficult to achieve: to include brick, stone, concrete, plantings, possibly to include some steel. Possibility of second point- to be confirmed during construction.
C	credit 6 Rapidly Renewable Materials (1 point possible) 2.5% cost of division 02-10 building materials, i.e., bamboo flooring, wool carpet, etc.	0	30%	Contractor	
C	credit 7 Certified Wood (1 point possible) Encourage environmentally responsible forest management by using certified wood for 50% of permanently installed wood.	0	30%	Contractor	

 <h1>Indoor Environmental Quality</h1>					
		Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes
d	prereq 1 Minimum IAQ Performance Establish minimum indoor air quality (IAQ) performance as per sections 4 through 7 of ASHRAE 62.1-2004 Ventilation Rate Procedure.	req'd	90%	Mechanical	General good practice.
d	prereq 2 Environmental Tobacco Smoke (ETS) Control option a: Prohibit indoor smoking and locate outside smoking areas far from windows, intakes or doors. option b: use designated smoking areas with stringent requirements option c (residential buildings): prohibit smoking in common areas, properly locate outside smoking areas and seal penetrations and chases between residential units.	req'd	90%	CRSA	Utah Clean Air Act and school policy prohibits smoking indoors.
d	credit 1 Outdoor Air Delivery Monitoring (1 point possible) Provide capacity for ventilation system monitoring to sustain occupant comfort. Monitor densely occupied spaces and outdoor airflow rates. Naturally ventilated spaces have different requirements.	1	80%	Mechanical	CO2 monitors in breathing zone of group spaces with demand controlled ventilation.
d	credit 2 Increased Ventilation (1 point possible) Breathing zone outdoor air ventilation rates to all occupied areas shall exceed ASHRAE 62.1-2004 minimum rates by 30%	1	80%	Mechanical	Mech to review.

C	credit 3 Construction IAQ Management Plan (1-2 points possible) 3.1. During Construction. Develop and implement an Indoor Air Quality (IAQ) Management Plan. MERV 8 on systems in use during construction, no forced air filters at grilles.	1	80%	Contractor	IAQ management plan carried out and documented by contractor
	3.2. Before Occupancy option a (flush out): total air volume of 14,000 cuft/sf of floor area while maintaining an internal temperature of at least 60degF and relative humidity ≤ 60%. option b (flush out): if occupancy is desired prior to flush out completion, can be allowed after 3500cuft/sf. Flush shall continue at 0.3 cfm/sf until 14,000cuft/sf has been achieved. option c (air testing): Conduct IAQ testing showing less than maximum concentrations listed.	1	80%	Contractor	Schedule item, may delay moving in or restrict items to be moved in. Or air testing likely will allow sooner move in date and will work for inclement weather.
C	credit 4 Low-Emitting Materials (1-4 points possible) 4.1. Adhesives & sealers must not exceed VOC limits (<i>including aerosol adhesives</i>)	1	80%	Contractor	Spec item, to be reviewed by architect.
	4.2. Paints, coatings, primers, varnishes, sealers, stains, etc. must not exceed the VOC limits	1	80%	Contractor	Spec item, to be reviewed by architect.
	4.3. Carpet system must meet or exceed requirements: carpet: CRI Green Label Plus carpet pad: CRI Green Label adhesive: VOC limit 50 g/L (same as EQ 4.1)	1	80%	Contractor	Spec item, to be reviewed by architect.
	4.4. Composite wood and agrifiber products must contain no added urea-formaldehyde resins. <i>On-site and shop assemblies must comply.</i>	1	80%	Contractor	Spec item, to be reviewed by architect.
d	credit 5 Indoor Chemical & Pollutant Source Control (1 point possible) Issue 1: Permanent entryway systems at all entries connected to the outdoors. Issue 2: janitorial closets, copy rooms & chemical mixing rooms all vented directly to exhaust ducts, have deck to deck partitions, self-closing doors, with pressure differentials as described. Issue 3: Use MERV 13 filters for both return & outside air prior to occupancy.	1	80%	CRSA	Requires MERV 13 filters Mech design to ensure filters, ventilation requirements and exhaust is met. Arch to ensure mats, hardware schedule and deck to deck partitions are met.
d	credit 6 Controllability of Systems (1-2 points possible) 6.1 Lighting: provide controls for 90% of occupants and controllability for all shared spaces that meets group needs/preferences. 6.2 Thermal Comfort: provide controls for 50% of occupants and controllability for all shared spaces that meets group needs/preferences.	1 0	75% 30%	Electrical Mechanical	Shared office spaces have individual task lights. Verify thermal controls.
	credit 7 Thermal Comfort (1-2 points possible) 7.1 Design. Provide for a thermally comfortable environment using ASHRAE 55-2004 Thermal Comfort Conditions for Human Occupancy 7.2 Verification. Survey occupants 6-18 months after occupancy. Develop a plan for corrective action if > 20% occupants are dissatisfied.	1 1	80% 80%	Mechanical	General good practice. Survey occupants after occupancy.
d	credit 8 Daylight & Views (1-2 points possible) Provide a connection between indoor spaces and outdoor environments through the introduction of sunlight and views into the occupied areas of the building. 8.1 Daylight. Achieve sufficient daylighting in 75% of all occupied spaces using one of the following methods: option a (calculation): 2% glazing factor; option b (simulation): 25 footcandles under clear sky conditions, at noon, equinox 30" above the floor; option c (measurement): 25 footcandles taken on a 10ft grid. 8.2 Views. Give access to views from 90% of all occupied spaces (not including systems furniture).	1 1	80% 20%	CRSA CRSA	LEED requires 75% of occupied spaces have usable daylight.

 <h1>Innovation & Design Process</h1>					
	Possible Points	confidence 0-40% = 0 41-65% = ? 66-100% = 1	Responsible Party	Project Notes	
C	credit 1 Innovation in Design (1-4 points possible) Exceptional performance above requirements set by the LEED Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by LEED.			These credits are MORE difficult to achieve than the others, and require more documentation.	
d	1.1. Education (case study, tours AND brochures)	1	75%	CRSA	Provide education of sustainable building measures.
d	1.2. Exceptional Performance on regional site drivers	0	50%	Contractor	Contractor can purchase green power with Renewable Choice Energy...keep as back up ID credit. Review other potential credits.
d	1.3. Exceptional Performance- Open Space ID	0	25%	CRSA	
d	1.4. Exceptional Performance- MR 4.0 - Exemplary Performance	0	25%	CRSA	Exceptional recycled content value
d	1.5. Exceptional Performance- Teleconference Meetings	0	70%	CRSA	
C	credit 2 LEED Accredited Professional (1 point possible) To support and encourage the design integration required by a LEED Green Building project and to streamline the application and certification process.	1	90%	CRSA	

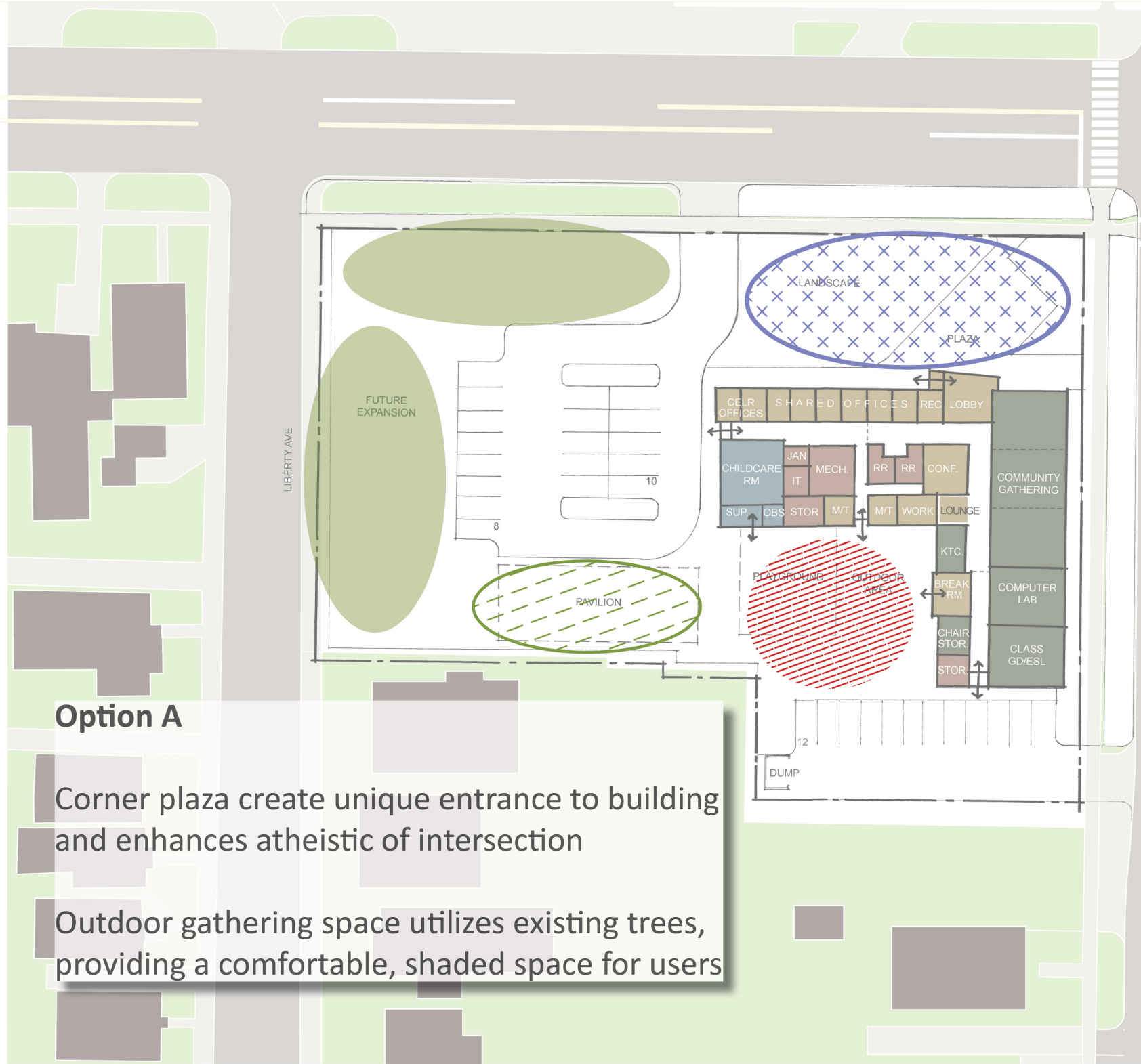
total possible points **40** + 3 other possibles

26-32 Certified 33-38 Silver 39-51 Gold 52-69 Platinum

3 - CONCEPTUAL SITE & BUILDING ORGANIZATION TEST FIT





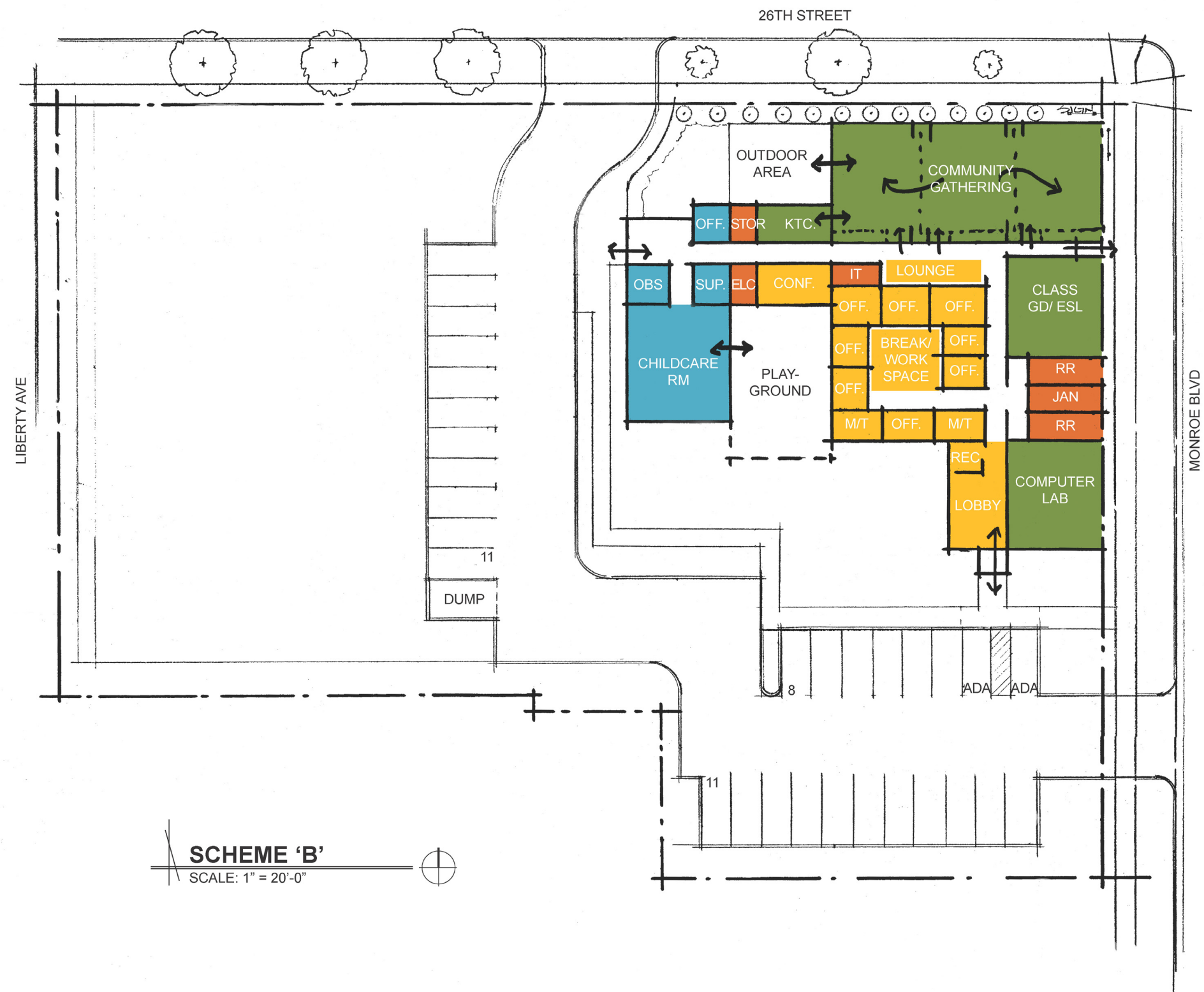


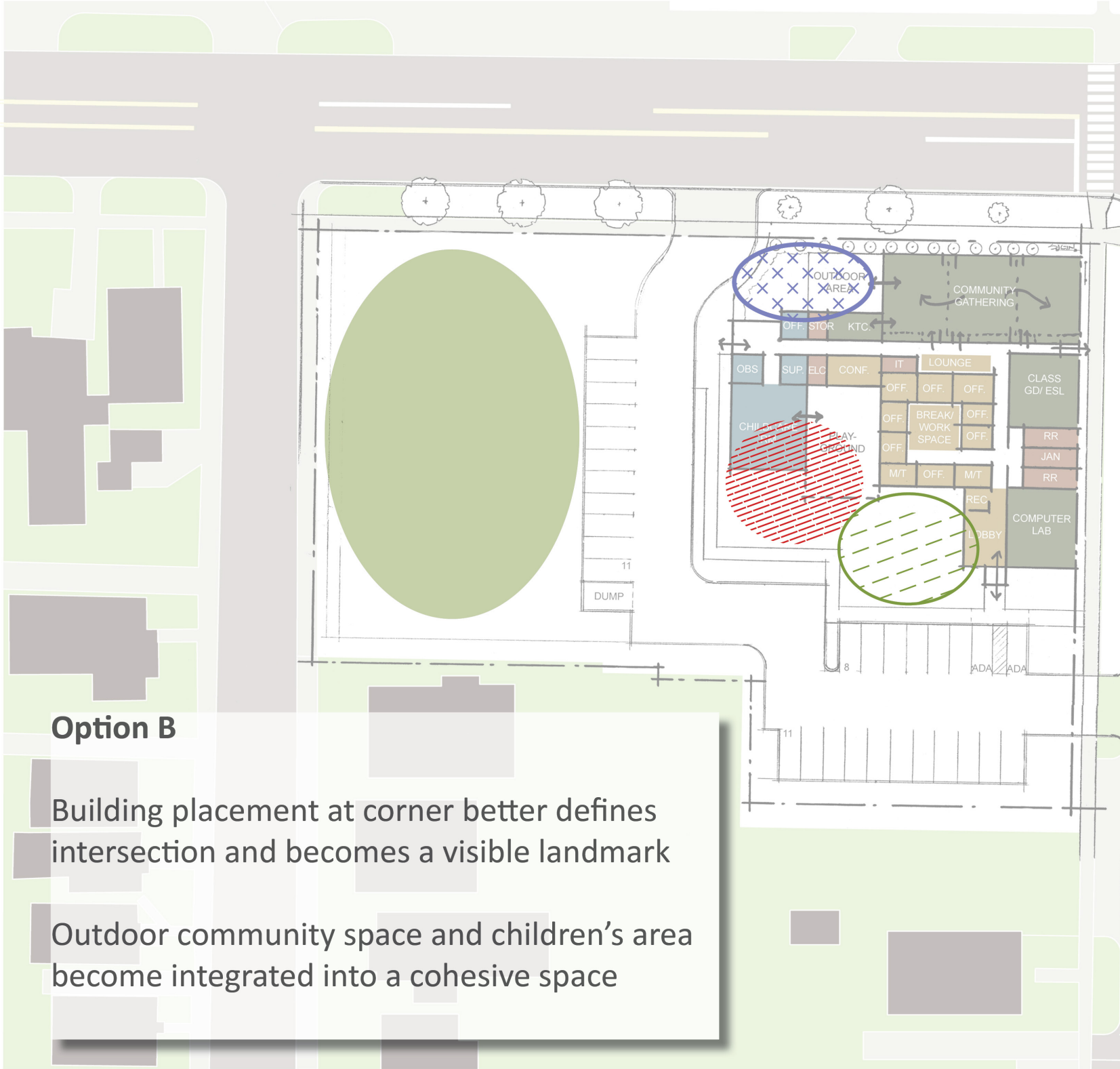
Option A

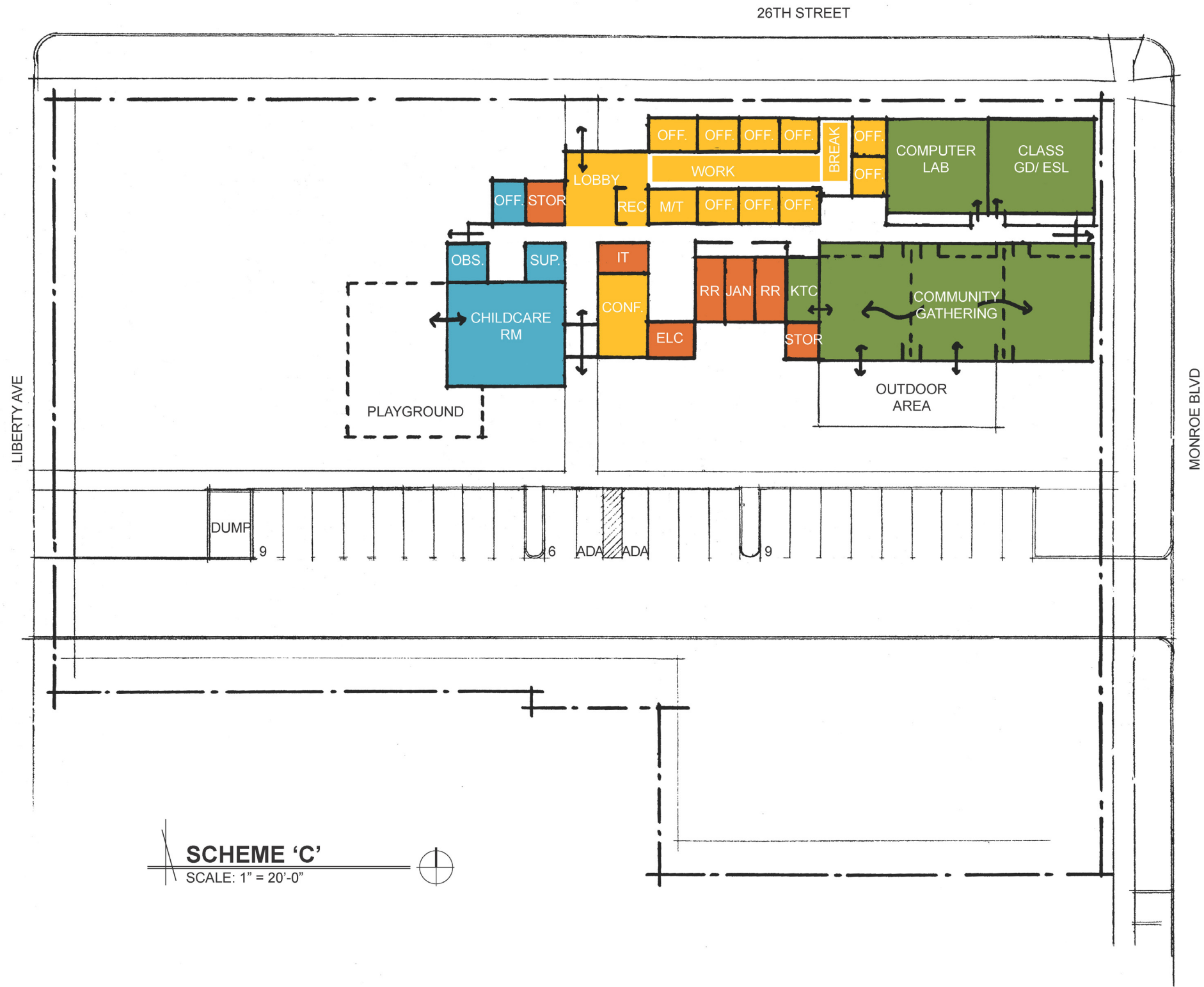
Corner plaza create unique entrance to building and enhances aesthetic of intersection

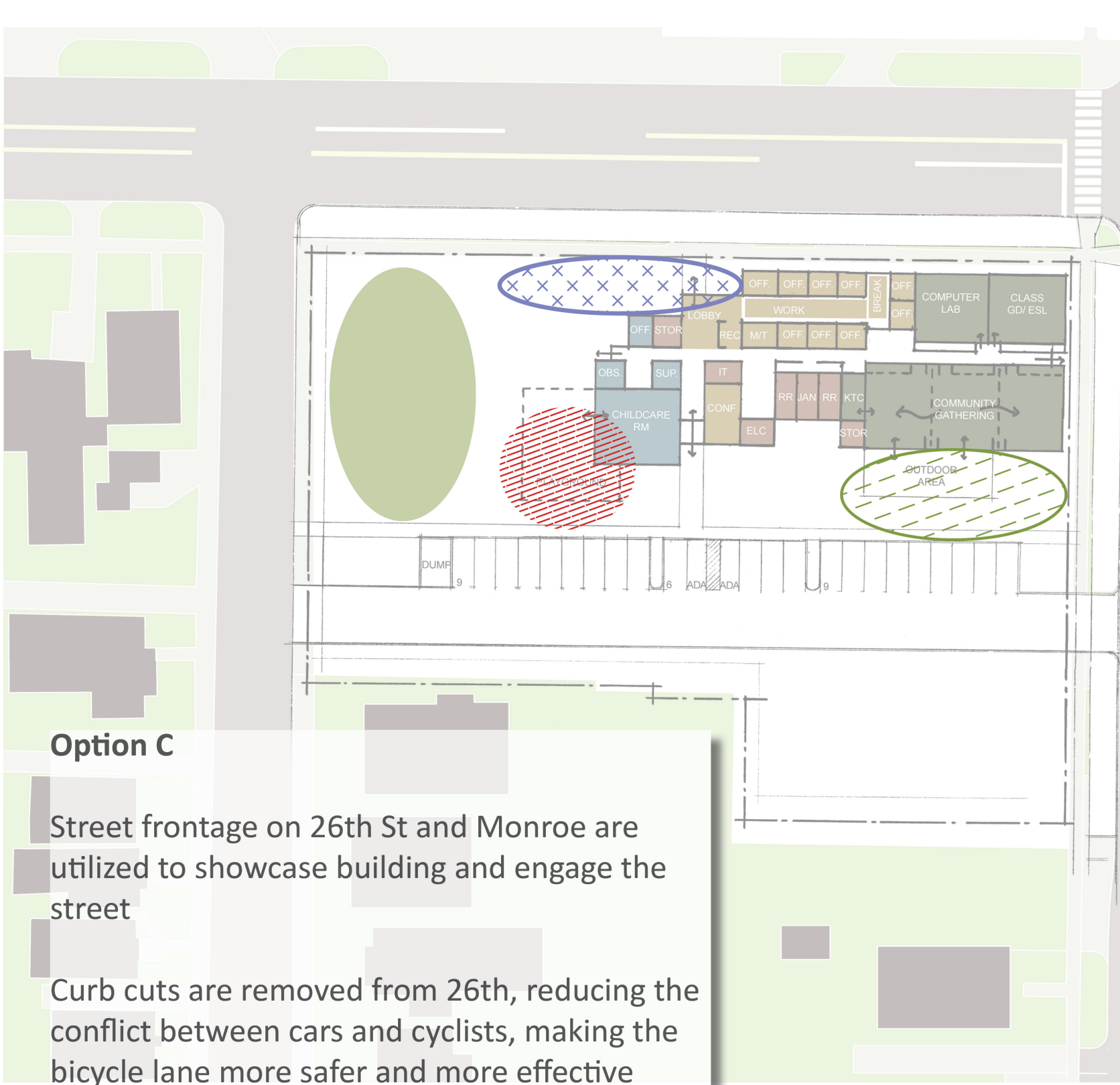
Outdoor gathering space utilizes existing trees, providing a comfortable, shaded space for users











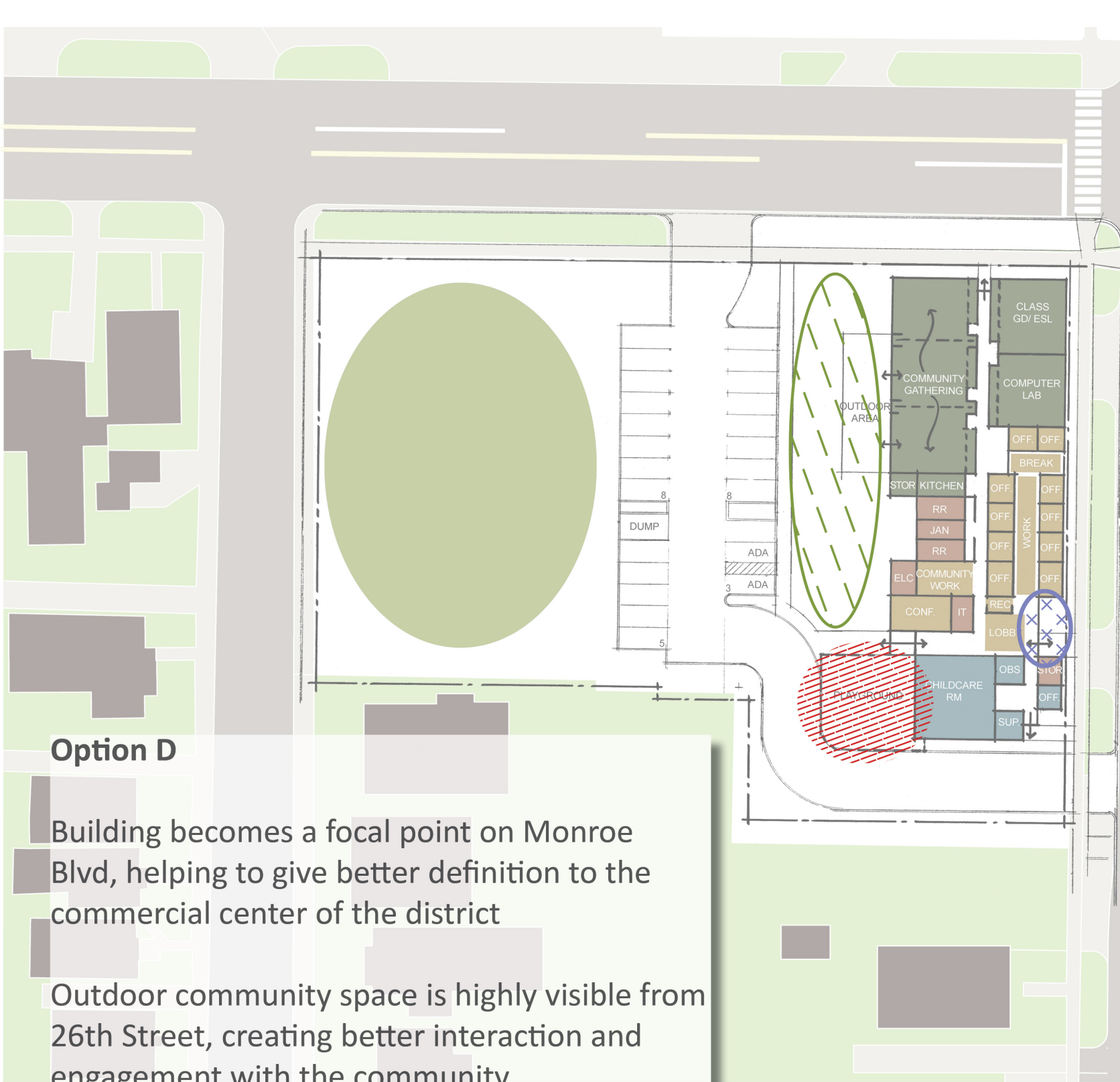
Option C

Street frontage on 26th St and Monroe are utilized to showcase building and engage the street

Curb cuts are removed from 26th, reducing the conflict between cars and cyclists, making the bicycle lane more safer and more effective







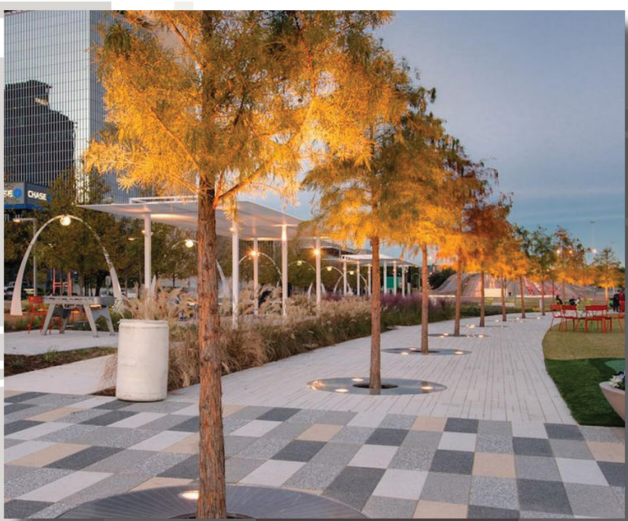
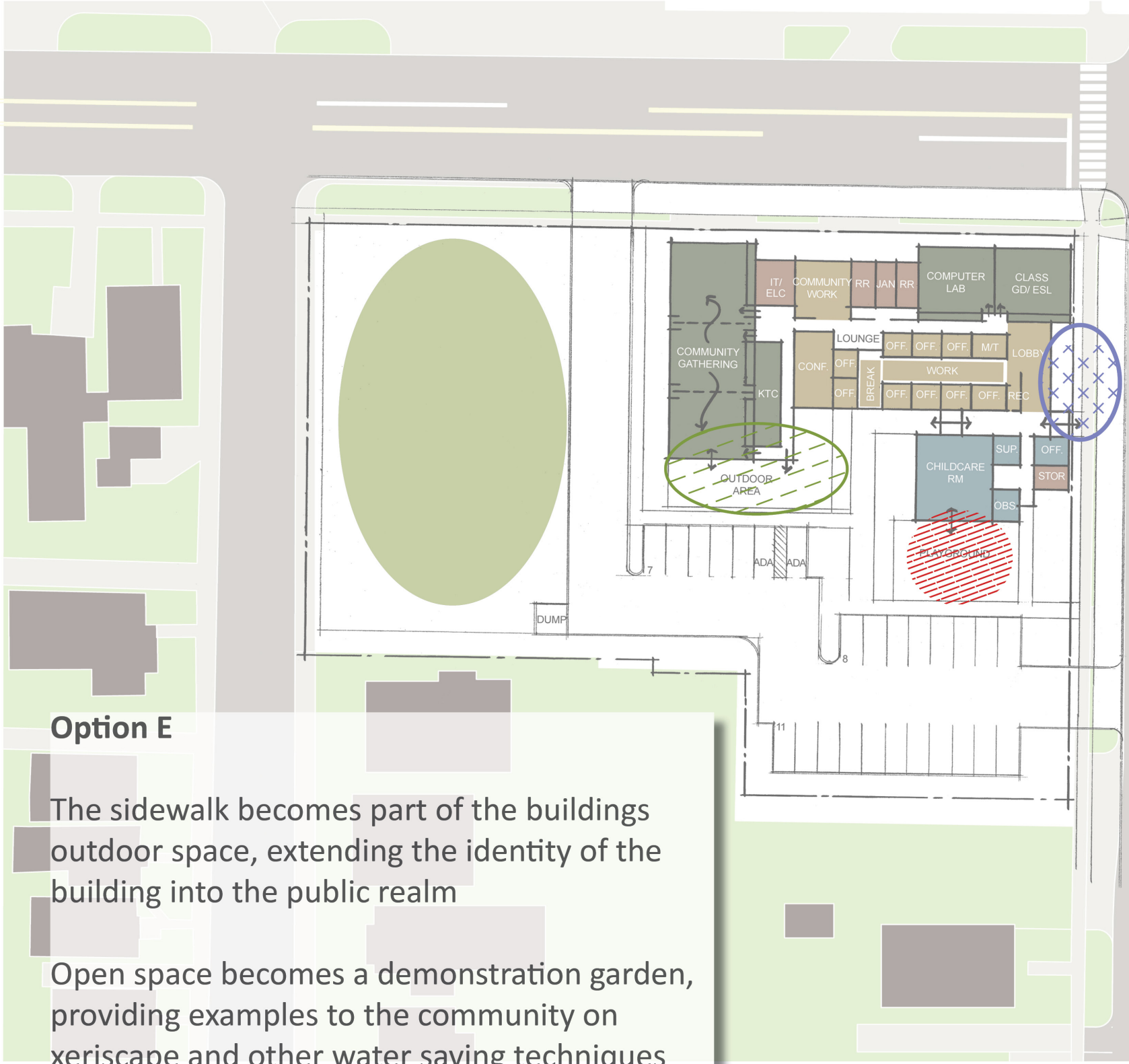
Option D

Building becomes a focal point on Monroe Blvd, helping to give better definition to the commercial center of the district

Outdoor community space is highly visible from 26th Street, creating better interaction and engagement with the community









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